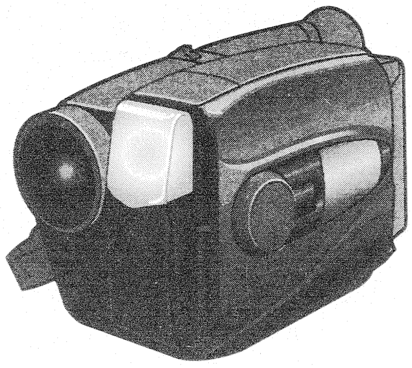
JVC

SERVICE MANUAL

COMPACT VHS CAMCORDER

GR-AX260EG/360EG/460EG



Compact VHS

VHS C

PAL

SPECIFICATIONS

GENERAL

Format	: VHS PAL standard
Power source	: DC 6 V ⎓
Power consumption	
GR-AX460 light on	: 8.7 W
GR-AX460 light off	: 5.7 W
GR-AX360	: 5.9 W
GR-AX260	: 5.7 W
Signal system	: PAL-type
Video recording system	
Luminance	: FM recording
Colour	: Converted sub-carrier direct recording Conforms to VHS standard
Cassette	: VHS C cassette
Tape speed	: 23.39 mm/sec
Recording time	
Max.	: 45 minutes (with EC-45 cassette)
Operating temperature	: 0°C to +40°C
Operating humidity	: 35% to 80%
Storage temperature	: –20°C to +50°C
Weight	
GR-AX460	: Approx. 770 g
GR-AX360	: Approx. 750 g
GR-AX260	: Approx. 760 g
Dimensions	
GR-AX460/AX260	: 109 (W) x 113 (H) x 226 (D) mm
GR-AX360	: 109 (W) x 113 (H) x 206 (D) mm

CAMERA

Pick up	: 1/4" format CCD
Minimum required illumination	: 2 lx (F1.2)
Illumination range	: 2 to 100,000 lx
Lens	: F1.2, f = 4.1 to 57.4 mm, 14:1 power zoom lens with auto iris and macro control, filter diameter 46 mm
Viewfinder	: Electronic viewfinder with • 0.55" colour LCD (GR-AX360) • 0.5" black/white CRT (GR-AX460/AX260)
White balance adjustment	: Auto/Manual adjustment

VIDEO

Output	: 1 Vp-p, 75 ohms, unbalanced (via VIDEO out connector)

AUDIO

Output	: –8 dBs, 1 k-ohm (via AUDIO out connector)

AAC POWER ADAPTER/BATTERY CHARGER (AA-V11EG) SPECIFICATIONS

Power requirement	: AC 110 to 240 V∿, 50/60 Hz
Power consumption	: 23 W
Output	: DC 8.5 V ⎓, 1.3 A (CHARGE), DC 6.3 V ⎓, 1.8 A (VTR)
Charging system	: Constant current, peak detection, timer controlled
Dimensions	: 150 (W) x 42 (H) x 68 (D) mm
Weight	: Approx. 350 g

CASSETTE ADAPTER (C-P7U) SPECIFICATIONS

Dimensions	: 188 (W) x 25 (H) x 104 (D) mm
Weight	: Approx. 240 g
Accessory	: "R6 (AA)"-size battery x 1

Provided Accessories ....☞ pg. 3

Optional Accessories

- **Battery Packs BN-V12U, BN-V22U, BN-V25U**
- **Car Battery Charger BH-V3E**
- **Battery Charger BH-VC10EG**
- **Car Battery Cord AP-V7E**
- **RF Unit RF-V5E**
- **Wireless Remote Control Unit RM-V704U**
- **Wired Remote Control Unit RM-V20U**
- **Compact VHS-C Cassettes EC-45/30**
- **Active Carrying Bag CB-V7U**

* Some acccessories are not available in some areas. Please consult your nearest JVC dealer for details on accessories and their availability.

E.&O.E.Design and specifications subject to change without notice.

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No. 86278
February 1996

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The following table lists the differing points between Models (GR-AX260EG, GR-AX360EG and GR-AX460EG) in this series.

	GR-AX260EG	GR-AX360EG	GR-AX460EG
VIEW FINDER	BLACK/WHITE	COLOUR	BLACK/WHITE
REMOTE CONTROLLER	OPTIONAL	←	PROVIDED
DC LIGHT	×	×	○
AUTO PAUSE SWITCH	×	×	○

NOTE: × NOT USED ○ USED
Mark ← is same as at left.

Important Safety Precautions

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

● Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

2. Parts identified by the ⚠ symbol and shaded (▨) parts are critical for safety.
   Replace only with specified part numbers.
   Note: Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

3. Fuse replacement caution notice.
   Caution for continued protection against fire hazard.
   Replace only with same type and rated fuse(s) as specified.

4. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads

5. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers
   4) Insulation sheets for transistors
   5) Barrier

6. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

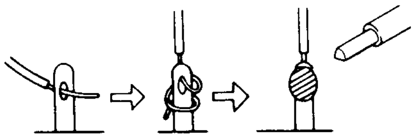


Fig. 1

7. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

8. Check that replaced wires do not contact sharp edged or pointed parts.

9. When a power cord has been replaced, check that 10–15 kg of force in any direction will not loosen it.

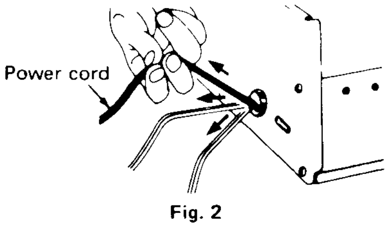


Fig. 2

10. Also check areas surrounding repaired locations.

11. Products using cathode ray tubes (CRTs)
    In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits. Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

12. Crimp type wire connector
    In such cases as when replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.
    1) **Connector part number** : E03830-001
    2) **Required tool** : Connector crimping tool of the proper type which will not damage insulated parts.
    3) **Replacement procedure**
       (1) Remove the old connector by cutting the wires at a point close to the connector.
       Important : Do not reuse a connector (discard it).

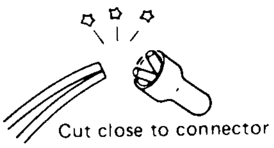


Fig. 3

       (2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

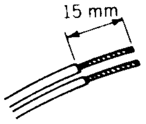


Fig. 4

       (3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

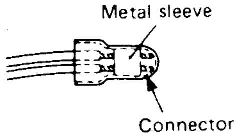


Fig. 5

       (4) As shown in Fig. 6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

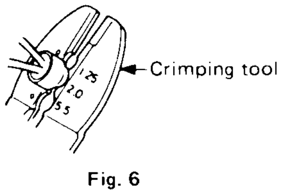


Fig. 6

       (5) Check the four points noted in Fig. 7.

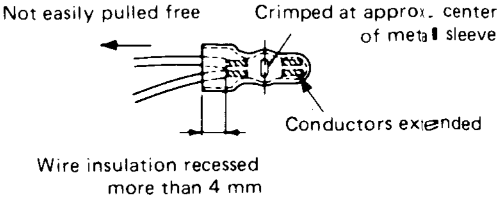

Not easily pulled free
Crimped at approx. center of metal sleeve
Conductors extended
Wire insulation recessed more than 4 mm

Fig. 7

● Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions, Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. **Insulation resistance test**
   Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

2. **Dielectric strength test**
   Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

3. **Clearance distance**
   When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table 1 below.

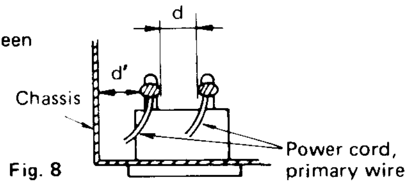


Fig. 8

4. **Leakage current test**
   Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).
   Measuring Method: (Power ON)
   Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure 9 and following table 2.

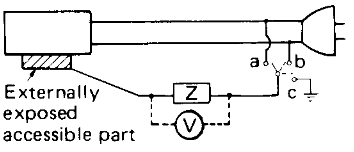


Fig. 9

5. **Grounding (Class I model only)**
   Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).
   Measuring Method:
   Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See figure 10 and grounding specifications.

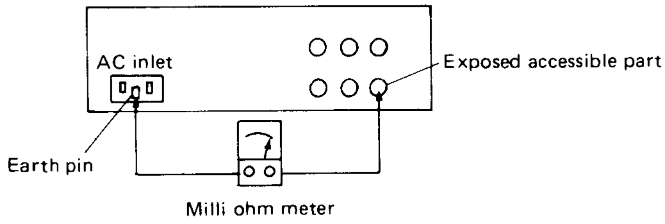


Fig. 10

Grounding Specifications

Region	Grounding Impedance (Z)
USA & Canada	Z ≦ 0.1 ohm
Europe & Australia	Z ≦ 0.5 ohm

AC Line Voltage	Region	Insulation Resistance (R)	Dielectric Strength	Clearance Distance (d), (d')
100 V	Japan	R ≧ 1 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3 mm
100 to 240 V			AC 1.5 kV 1 minute	d, d' ≧ 4 mm
110 to 130 V	USA & Canada	–	AC 1 kV 1 minute	d, d' ≧ 3.2 mm
110 to 130 V 200 to 240 V	Europe & Australia	R ≧ 10 MΩ /500 V DC	AC 3 kV 1 minute (Class II) AC 1.5 kV 1 minute (Class I)	d ≧ 4 mm d' ≧ 8 mm (Power cord) d' ≧ 6 mm (Primary wire)

Table 1 Specifications for each region

AC Line Voltage	Region	Load Z	Leakage Current (i)	a, b, c
100 V	Japan	1 kΩ	i ≦ 1 mA rms	Exposed accessible parts
110 to 130 V	USA & Canada	0.15 µF 1.5 kΩ	i ≦ 0.5 mA rms	Exposed accessible parts
110 to 130 V 220 to 240 V	Europe & Australia	2 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Antenna earth terminals
		50 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Other terminals

Table 2 Leakage current specifications for each region

Note: These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

INSTRUCTIONS

Dear Customer,
Thank you for purchasing the JVC Compact VHS camcorder. Before use, please read the safety information and precautions contained in the following pages to ensure safe use of your new camcorder.

Using This Instruction Manual

- All major sections and subsections are listed in the Table Of Contents (☞ pg. 3).
- Notes appear after most subsections. Be sure to read these as well.
- Basic and advanced features/operation are separated for easier reference.

It is recommended that you . . .

..... refer to the Index (☞ pgs. 36, 37) and familiarize yourself with button locations, etc. before use.

..... read thoroughly the Safety Precautions that follow and cautions (☞ pgs. 38, 39). They contain extremely important information regarding the safe use of your new camcorder.

SAFETY PRECAUTIONS

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTIONS:

- ■ To prevent shock, do not open the cabinet. No user serviceable parts inside. Refer servicing to qualified personnel.
- ■ When you are not using the AC Power Adapter/Battery charger for a long period of time, it is recommended that you disconnect the power cord from AC outlet.

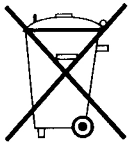
- ■ Camcorder is designed exclusively for the VHS-C video cassette. Only cassettes marked VHS-C can be used with this unit.
- ■ HQ VHS is compatible with existing VHS equipment.

Warning on lithium battery

The battery used in this device may present a fire or chemical burn hazard if mistreated. Do not recharge, disassemble, heat above 100°C or incinerate.
Replace battery with Panasonic (Matsushita Electric), Sanyo or Maxell CR2025; use of another battery may present a risk of fire or explosion.

- ■ Dispose of used battery promptly.
- ■ Keep away from children.
- ■ Do not disassemble and do not dispose of in fire.

Crossed Out Dust Bin Mark


Cd

- ■ The Crossed Out Dust Bin Mark on the battery pack indicates that the product complies with Directives 91/157/EEC and 93/86/EEC.
- ■ Nickel-Cadmium (Ni-Cd) battery pack must be recycled or disposed of properly.

This camcorder is designed to be used with PAL-type colour television signals. It cannot be used for playback with a television of a different standard. However, live recording is possible anywhere. Use the BN-V12U/V22U/V25U battery packs and, to recharge them, the provided multi-voltage AC Power Adapter/Charger. (An appropriate conversion adapter may be necessary to accommodate different designs of AC outlets in different countries.)

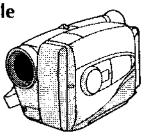
NOTES:

- *The rating plate (serial number plate) and safety caution are on the bottom and/or the back of the main unit.*
- *The rating plate (serial number plate) of the AC Power Adapter/Charger is on its bottom.*

This unit is produced to comply with Standard IEC Publ. 65.

MAJOR FEATURES

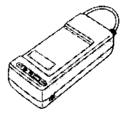
- ■ Programme AE with Special Effects (☞ pg. 14)
- ■ Intelligent Function Control (☞ pg. 16 – 23)
- ■ 14x Variable-Speed Hyper Zoom (☞ pg. 11)
- ■ EasyEdit (Random Assemble Editing) (☞ pg. 30 – 33)
- ■ Desigh-Integrated Auto Light (GR-AX460 only) (☞ pg. 13)

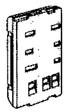


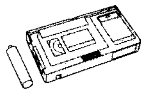
REMEMBER

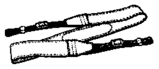
The Logical Choice
Compact VHS
VHS C
The only compact video cassettes that can be used with your VHS VCR*
*with Cassette Adapter

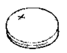
PROVIDED ACCESSORIES

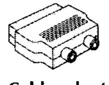

- AC Power Adapter/Charger AA-V11EG

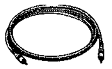

- Battery Pack BN-V12U

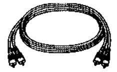

- Cassette Adapter C-P7U

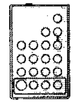

- Shoulder Strap


- Lithium Battery CR2025


- Cable adapter


- Editing cable


- AUDIO/VIDEO (A/V) cable


- Remote Control Unit RM-V704U (GR-AX460 only)

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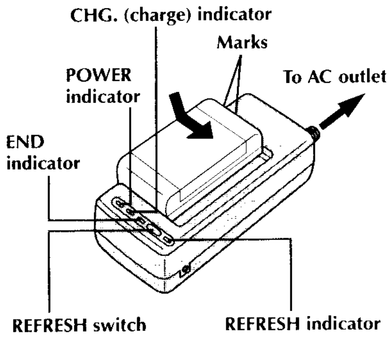
Power

This camcorder's 3-way power supply system lets you choose the most appropriate source of power.

NOTES:

- *No function is available without power supply.*
- *Use only specified power supply.*
- *Do not use provided power supply units with other equipment.*

CHARGING THE BATTERY PACK



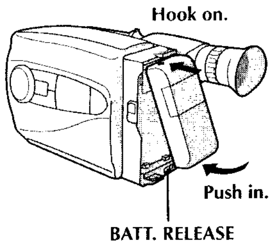
1 SUPPLY POWER
Connect the charger's AC power cord to a wall outlet. The power indicator lights.

2 ATTACH BATTERY PACK
Align the marks and slide the battery pack in the direction of the arrow until it locks in place.
The CHG. indicator lights.

3 DETACH BATTERY PACK
When charging is completed, the END indicator lights. Slide the battery pack opposite the direction of the arrow.

BATT. PACK	CHARGE	DISCHARGE
BN-V12U	approx. 1 hr. 10 min.	approx. 3 hrs. 30 min.
BN-V22U	approx. 2 hrs. 10 min.	approx. 7 hrs.
BN-V25U	approx. 2 hrs. 40 min.	approx. 10 hrs.

USING THE BATTERY PACK



1 ATTACH BATTERY PACK
Hook its top end to the camcorder and push the battery pack in until it locks in place.

2 DETACH BATTERY PACK
Slide BATT. RELEASE and pull out the battery pack.

BATT. PACK	APPROXIMATE RECORDING TIME	
	GR-AX460/AX260	GR-AX360
BN-V12U	1 hr. 5 min. (35 min.)	1 hr.
BN-V22U	2 hrs. 15 min. (1 hr. 25 min.)	2 hrs. 10 min.
BN-V25U	3 hrs. (1 hr. 50 min.)	2 hrs. 50 min.

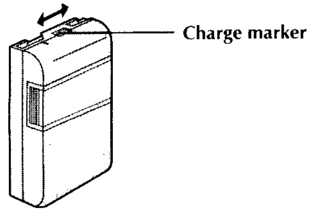
( ) : when the video light is on (GR-AX460 only).

****REFRESH**

The AC power adapter features a REFRESH function that allows you to fully discharge the battery pack before recharging.

To discharge the battery . . .

..... attach the battery pack to the adapter as shown in the illustration to the left. Then push REFRESH. The REFRESH indicator lights when discharging starts, and goes out when discharging is complete.

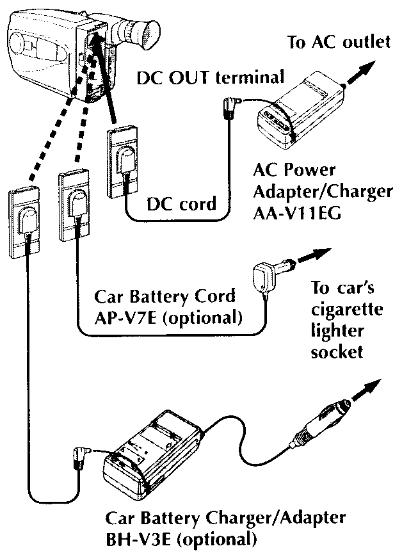


****CHARGE MARKER**

A charge marker is provided on the battery pack to help you remember whether it has been charged or not. Two colours are provided (red and black)—you choose which one means charged and which means discharged.

NOTES:

- *The recording time per charge is affected by such factors as the time spent in Record/Standby mode and the frequency of zooming. It is safer to have spare battery packs.*
- *Charging times noted on page 4 are for fully discharged battery pack, and discharging times are for fully charged battery pack.*
- *Charging and discharging times vary according to the ambient temperature and the status of the battery pack.*
- *Remember to set the charge marker after charging a battery pack or after detaching a discharged one from your camcorder.*
- *Perform the REFRESH function after no less than 5 chargings.*
- *High temperatures can damage the battery pack, so use only where good ventilation is available. Don't allow it to discharge in container, such as a bag.*
- *If you stop recharging or discharging partway through, make sure to remove the battery pack before unplugging the adapter's AC cord.*
- *Remove the battery pack from the adapter immediately after discharging.*
- *To avoid interference with reception, do not use the AC Power Adapter/Charger near a radio.*
- *Make sure you unplug the DC cord before charging or discharging the battery pack.*
- *A blinking CHG. indicator means that the battery pack has become hot. Wait until it cools down to continue.*
- *The CHG. indicator may not light properly with a brand new battery pack, or with one that's been stored for an extended period. In this case, remove and reattach the battery pack and recharge it. The CHG. indicator should light during recharging. If not, contact your nearest JVC dealer.*


To AC outlet
DC OUT terminal
AC Power Adapter/Charger AA-V11EG
DC cord
Car Battery Cord AP-V7E (optional)
To car's cigarette lighter socket
Car Battery Charger/Adapter BH-V3E (optional)

USING A CAR BATTERY

Use the optional Car Battery Cord or Car Battery Charger/Adapter (connect as shown in the illustration to the left).

NOTES:

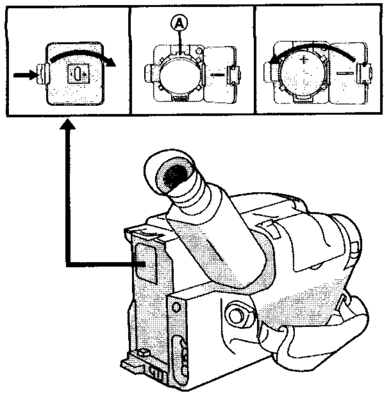
- *When using the car battery, leave the engine idling.*
- *The optional Car Battery Charger (BH-V3E) can also be used to charge the battery pack.*
- *When using the optional Car Battery Charger or Car Battery Cord (AP-V7E), refer to the respective instruction booklet.*

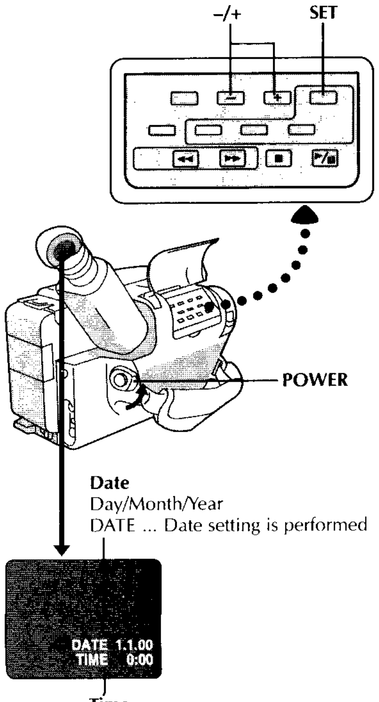
USING AC POWER

Use the AC Power Adapter (connect as shown in the illustration to the left).

NOTE:

The supplied AC Power Adapter/Charger features automatic voltage selection in the AC range from 110 V to 240 V.





Date
Day/Month/Year
DATE ... Date setting is performed

Time
24-hour indication
TIME .... Time setting is performed

Clock (Lithium) Battery Removal/Insertion

This battery is necessary to operate the clock and to perform date/time settings.

1 SWITCH OFF POWER

Switch off the unit's power and remove the power supply unit.

2 OPEN COVER

Open the clock battery compartment cover while pressing the release tab.

3 REMOVE BATTERY (when replacing)

Insert a pointed, non-metallic object between the battery and the compartment (Ⓐ) and pull the battery out.

4 INSERT BATTERY

Ensuring the plus (+) side is up, insert the supplied lithium battery and push it in.

5 CLOSE COVER

Close the compartment cover until it clicks in place.

NOTE:

See "SAFETY PRECAUTIONS" (☞ pg. 2) for information on safe handling of lithium batteries.

Date/Time Settings

1 SELECT MODE

Set the power switch to CAMERA.

2 SET DATE/TIME

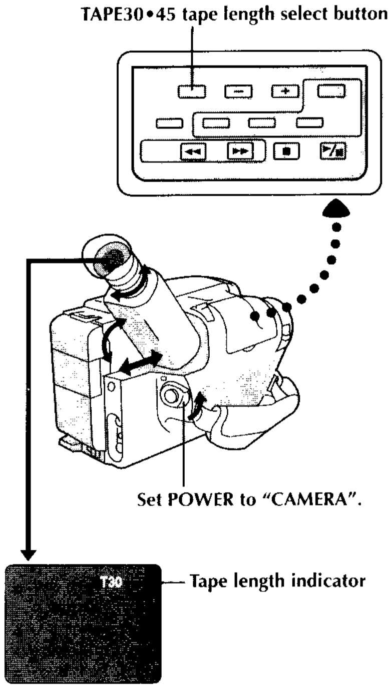
Press **SET** and the day blinks. Press **+** or **–** to set the day. Repeat to set month, year, hour and minute.

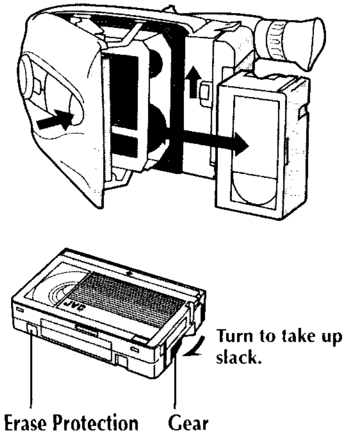
3 START CLOCK

Press **SET**. The blinking stops. The date and time are both displayed for confirmation, then the time display disappears.

NOTE:

The clock does not keep time while the date and time are blinking.





Viewfinder Adjustment

1 POSITION VIEWFINDER

Adjust the viewfinder manually for best viewability (see illustration at left).

2 SELECT MODE

Set the power switch to CAMERA.

3 ADJUST DIOPTER

Turn the diopter adjustment control until the indications in the viewfinder are clearly focused.

Tape Length Setting

1 SET TAPE LENGTH

Set the tape length button according to the length of the tape used. T30 = 30 minutes of recording time and T45 = 45 minutes.

Loading/Unloading A Cassette

1 OPEN CASSETTE HOLDER

Slide EJECT until holder opens. Do not use force to open.

2 INSERT/REMOVE CASSETTE

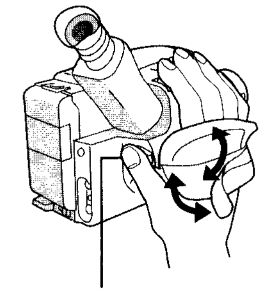
Make sure label is facing outward.

3 CLOSE CASSETTE HOLDER

Press PUSH and make sure the holder is closed and locked.

NOTES:

- *A cassette holder can't be opened unless a power supply is attached.*
- *Make sure that the tape is not slack when loading the cassette. If there is any slack, turn the gear on the cassette in the direction of the arrow to take up the slack.*
- *Make sure the Erase Protection tab is present. If not, cover the hole with adhesive tape. (Some cassettes have sliding tabs – in this case, check the tab's position.)*



Grip Adjustment

1 EXPAND LOOP

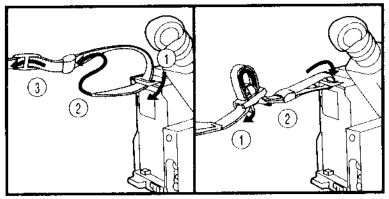
Separate the Velcro strip.

2 INSERT HAND

Pass your right hand through the loop and grasp the grip.

3 ADJUST STRAP LENGTH

Adjust so your thumb and fingers can easily operate the Recording Start/Stop button and Power Zoom switch. Refasten the Velcro strip.



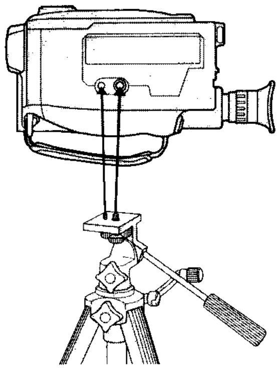
Shoulder Strap Attachment

1 ATTACH STRAP

Following the illustration at left, thread the strap through the top of the eyelet ①, then fold it back and thread it through the keeper ②, and then through the buckle ③. Repeat the procedure to attach the other end of the strap to the other eyelet, making sure the strap isn't twisted.

2 ADJUST LENGTH

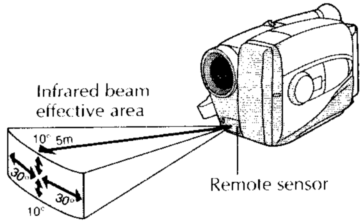
Adjust as shown in the illustration at left ①, then slide both keepers snug against the eyelets to prevent slipping ②.



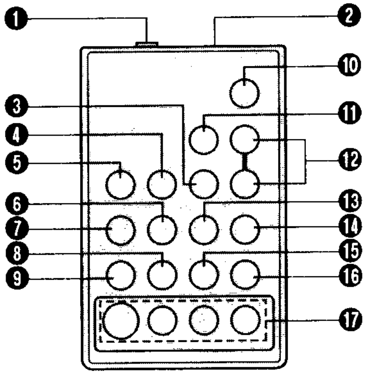
Tripod Mounting

1 ALIGN AND TIGHTEN

Align the screw and camera direction stud on the tripod with the camera's mounting socket and stud hole. Then tighten the screw.



The transmitted beam may not be effective or may cause misoperations when the remote sensor is directly exposed to sunlight or powerful lighting.



Remote Control Unit

The RM-V704U Full-Function Remote Control Unit can operate this camcorder from a distance as well as the basic operations (PLAY, STOP, PAUSE, FF, and REW) of your VCR. This remote control unit makes additional recording functions possible. To operate, point it at the camcorder's remote sensor. The RM-V704U is provided with GR-AX460, and is available optionally for GR-AX360/AX260.

1 PULL OUT BATTERY HOLDER

Pull out the battery holder according to the type of remote control unit you have.

Type Ⓐ: Pull out the battrery holder while sliding the lock hole.

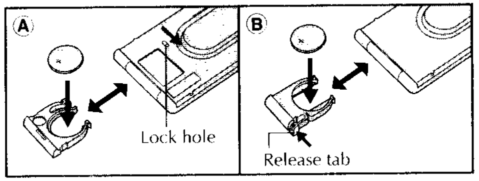
Type Ⓑ: Pinch the release tab and pull out the battery holder.

2 INSERT BATTERY

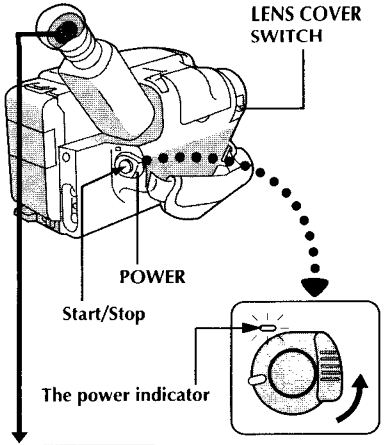
Insert the lithium battery* (CR2025), with its plus (+) side up, into the battery holder.

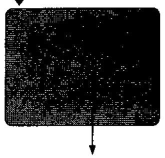
3 REPLACE BATTERY HOLDER

Replace the battery holder until it clicks in place.
*Read warning on lithium battery. (☞ pg. 2)

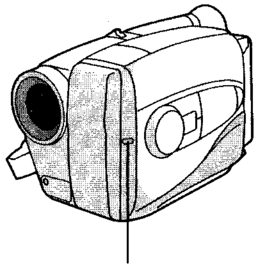


Buttons	Functions	
	With the camcorder's power switch set to "CAMERA".	With the camcorder's power switch set to "PLAY".
❶ PAUSE IN connector	—	☞ pg. 32
❷ Infrared beam transmitting window	Transmits the beam signal.	
❸ MBR SET button	—	☞ pg. 31
❹ INT. TIME button	Self-Timer/Time lapse (☞ pg. 24, 25)	—
❺ REC TIME button	Animation/Time lapse (☞ pg. 25)	—
❻ FF button	Retake (Forward) (☞ pg. 11)	FF/FF Shuttle Search (☞ pg. 28)
❼ REW button	Retake (Rewind) (☞ pg. 11)	Rew/Rew Shuttle Search (☞ pg. 28)
❽ PAUSE button	—	Pause (☞ pg. 29)
❾ PLAY button	—	Playback start (☞ pg. 28)
❿ START/STOP button	Functions same as the Recording Start/Stop button of the camcorder.	
⓫ VISS button	Index code marking (☞ pg. 12)	—
⓬ ZOOM (T/W) button	Zoom (invariable speed) (☞ pg. 11)	—
⓭ VCR CTL button	—	☞ pg. 31
⓮ A. DUB button	—	Audio dubbing (☞ pg. 35)
⓯ STOP button	—	Stop (☞ pg. 28)
⓰ INSERT button	—	Insert Editing (☞ pg. 34)
⓱ R. A. EDIT button	—	☞ pg. 32





45MIN ⟶ 44MIN ------→ 3MIN
1MIN (Blinking) ⟵ 2MIN (Blinking)
0MIN (Blinking)
*---MIN.....(Now calculating)



NOTE:

You should already have performed the procedures listed below. If not, do so before continuing.

- *Power (☞ pg. 4)*
- *Tape Length Setting (☞ pg. 7)*
- *Grip Adjustment (☞ pg. 8)*

1 LOAD A CASSETTE

Slide EJECT to open the cassette holder, then insert the cassette with the label facing out. Press PUSH to ensure the holder is closed and locked.

2 ENTER RECORD-STANDBY MODE

Slide the LENS COVER open/close switch to open the lens cover, then set the power switch to CAMERA.

- The power indicator lights and the camcorder enters the Record-Standby Mode.
- The scene you're aimed at appears on the viewfinder screen, with the word "PAUSE" superimposed upon it.

3 START SHOOTING

Press the Recording Start/Stop button.

- The tally lamp lights while recording is in progress, and "REC ▶▶▶" appears in the viewfinder.

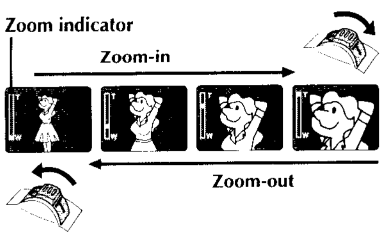
4 STOP RECORDING

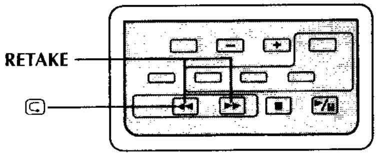
Press the Recording Start/Stop button again.

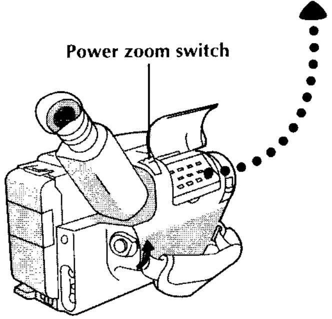
- The comcorder re-enters the Record-Standby mode.

NOTES:

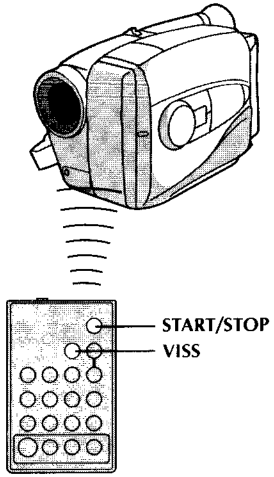
- *A cassette holder can't be opened unless a power supply is attached.*
- *There may be a delay after you slide EJECT until the holder opens. Do not use force.*
- *The tape's remaining time is displayed in the viewfinder as shown.*
- *"TAPE END" appears when the tape recheas its end, and the power goes off automatically if left in this condition for 5 minutes. "TAPE END" also appears when a cassette whose tape is already at its end is loaded.*
- *If the Record-Standby mode continues for 5 minutes, the camcorder's power shuts off automatically. Set the power switch to POWER OFF, and then back to CAMERA to turn the camcorder on again.*
- *If you're recording on a cassette from the middle, use the RETAKE function (☞ pg. 11) to find the end of the last recording so you don't erase any of it.*
- *The LENS COVER warning blinks for about 5 seconds when the camcorder is turned on, whether the cover is open or closed.*



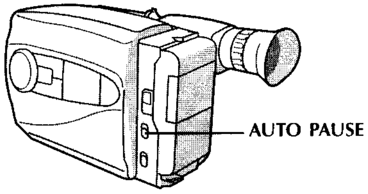


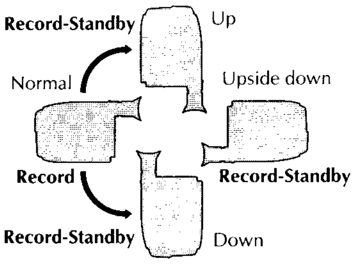


FEATURE:	**Zooming**
PURPOSE:	To vary the length of the focal lens and produce zoom in/out effect.
OPERATION:	*Zoom In* 1) Pull the power zoom switch down toward "T". *Zoom Out* 2) Push the switch up toward "W".
NOTES:	● *The further the power zoom switch is pushed or pulled, the faster the zoom speed becomes.* ● *Focusing may become unstable during zooming. In this case, set zoom while in Record-Standby, set manual focus or Focus Lock (☞ pg. 18, 19), then zoom in or out in Record mode.*
FEATURE:	**Quick Review**
PURPOSE:	To check end of last recording for confirmation.
OPERATION:	1) Press "⊡" for less than 2 seconds during Record-Standby mode. • Tape is rewound for about 2 seconds and played back automatically, then pauses in Record-Standby mode for next shot.
NOTE:	*Distortion may occur at start of playback. This is normal.*
FEATURE:	**Retake**
PURPOSE:	To re-record certain segments.
OPERATION:	1) Make sure camcorder is in Record-Standby mode. 2) Press either **RETAKE** button to reach start point for new recording. 3) Press Recording Start/Stop to start recording.
NOTE:	*Noise may appear during Retake. This is normal.*

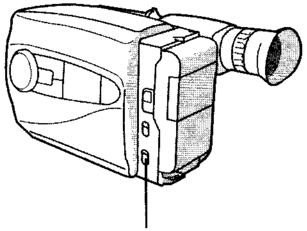


RM-V704U
(provided with GR-AX460, optional for GR-AX360/AX260)





FEATURE:	**Index Code Marking**
PURPOSE:	To give you automatic access to any selected point on a recording. Auto Marking and Manual Marking are available.
OPERATION:	*Auto Marking* An index code is always marked to start the first recording on a new date after a cassette is inserted. *Manual Marking* 1) Press **VISS** once to place index code. INDEX blinks in the viewfinder during marking.
NOTES:	● *If **VISS** is pressed during Record-Standby mode, the mark is placed where **START/STOP** is pressed.* ● *If the date changes during a recording, it becomes the first recording of the new date and an index mark is placed at that point.*
FEATURE:	**AUTO PAUSE SYSTEM (GR-AX460 only)**
PURPOSE:	To automatically stop recording when the camcorder is pointed down, preventing accidental recordings of the ground, your feet, etc.
OPERATION:	1) Set **AUTO PAUSE** to "ON". When the camcorder is tilted down by a large degree from its horizontal position during recording, the Record-Standby mode is automatically engaged. "AUTO PAUSE" appears in the viewfinder.
NOTES:	● *The Auto Pause System is also effective when the camcorder is pointed up, or is positioned upside down.* ● *Auto Pause also works when the camcorder is twisted by a large degree to the left or right.* ● *When you want to shoot in any of the aforementioned positions, make sure you set **AUTO PAUSE** to "OFF".*



Video Light (GR-AX460 only)

When natural lighting is too dim, you can brighten the scene by using the built-in video light.

SET VIDEO LIGHT

1 **Set the LIGHT ON/AUTO/OFF as required.**

ON : Always keeps the light on as long as the camcorder is turned on.
AUTO : Automatically turns on the light when the camcorder senses insufficient lighting on the subject.
OFF : Turns off the light.

- The video light can be used with the camcorder's power on.
- It is recommended to set the white balance to indoor mode (☼) (☞ pg. 15) when you use the video light.
- When not using the video light, turn it off to save battery power.

NOTES:

- Even if the battery indicator (▭) does not blink in the viewfinder, if the battery pack's charge is low, the camcorder may turn off automatically when you turn on the video light, or when you start recording with the video light turned on.
- When the LIGHT ON/AUTO/OFF is set to "AUTO":
  - Depending on the lighting condition, the video light may not be stably turned on or off. In this case, switch the light on and off manually.
  - While the Sports or High-Speed Shutter mode (☞ pg. 14) is engaged, the light is likely to stay on.
  - While the Twilight mode (☞ pg. 14) is engaged, the light will not activate.

DANGER:

- The video light becomes extremely hot. Do not touch it either while in operation or soon after turning it off, otherwise serious injury may result.
- Do not place the camcorder into the carrying case immediately after using the video light, since it remains extremely hot.
- When operating, keep a distance of about 30 cm between the video light and people or object.
- Do not use near flammable or explosive materials.
- It is recommended that you consult your nearest JVC dealer for replacing the video light.

Program AE With Special Effects

All you have to do to access any of the variety of shooting effects is to turn the PROGRAM AE select dial until the desired indication appears in the viewfinder. The mode is activated about 1 second later.

DIAL SYMBOL	VIEWFINDER	MODE
LOCK	A AUTO LOCK	Auto Mode Lock

Auto Mode Lock
Locks camcorder in Full Auto mode, preventing accidental misoperation/button pressing during shooting.

- CINEMA, FADER, FOCUS, EXPOSURE, DISPLAY, TITLES and MWB (Manual White Balance) controls are disabled in this mode.

RELEASE	M AUTO RELEASE	Auto Mode Release

Auto Mode Release
Re-enables controls that were disabled by Auto Mode Lock.

FG	FG:FOG	Electronic Fog Filter

Electronic Fog Filter
Makes picture look misty white, as when external fog filter is attached to lens. Softens image and gives it "fancy" look.

ND	ND:ND EFFECT	ND Effect

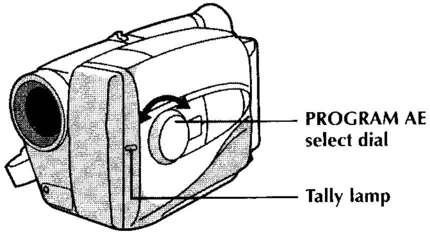
ND EFFECT
Black mist darkens picture, as when ND filter is used. Helps to counter effects of glare on subject.

◩	◩ SEPIA	Sepia

Sepia
Scene being shot is recorded in sepia-tinted (reddish-brown) monochrome, giving effect of older movie. Use together with Cinema (☞ pg. 17) for authentic look of classic Hollywood movie.

★☾	★☾ TWILIGHT	Twilight

Twilight
Disengages auto gain control and auto focus, locks focus to infinity and white balance to "☀" (outdoor) mode. Dusk, twilight scenery, fireworks, etc., look more natural and dramatic.



DIAL SYMBOL	VIEWFINDER	MODE
🏃	🏃 SPORTS	Sports

Sports
High shutter speed clearly captures fast-moving action.

1/2000	S 1/2000	High Speed Shutter

High-Speed Shutter (1/2000s.)
Captures faster action than Sports mode.

⏲	⏲ SELF TIMER	15 sec. Self-Timer

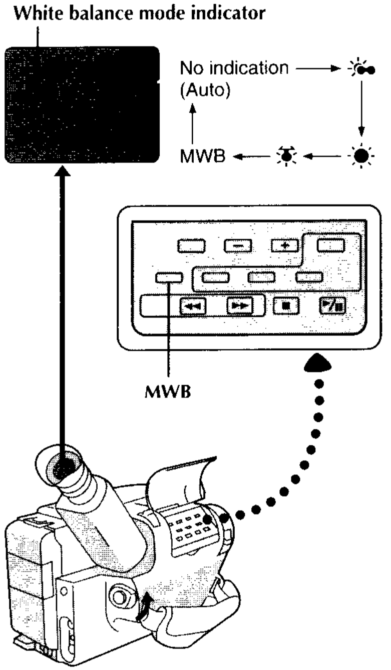
15 sec. Self-Timer
Lets you delay recording start after Recording Start/Stop is pressed. If camcorder is secured, operator can enter scene before recording starts.

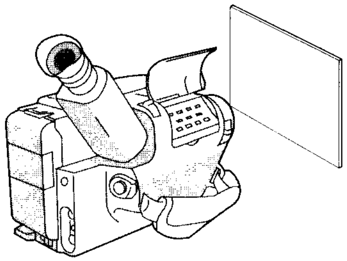
1) Set **PROGRAM AE** dial to "⏲". "⏲ 15S" appears in viewfinder.
2) Press Recording Start/Stop.

- Recording starts after 15 seconds.
- Tally lamp begins blinking; blinking speed increases about 5 seconds before recording starts. Blinking stops when recording begins but light stays on.

NOTES:

- *Only one effect can be engaged at a time.*
- *When the PROGRAM AE select dial is switched from one mode to another, the newly selected mode's name and its indication is displayed in the viewfinder for approx. 3 seconds. Then the name disappears, and only the indication remains.*
- *The screen becomes slightly reddish when the fader (☞ pg. 16) is used in the Sepia mode.*
- *The screen becomes slightly dark in the High Speed Shutter mode. Use in well-lighted situations.*
- *In the High Speed Shutter or Sports modes, picture colour may be adversely affected if subject is lit by alternating discharge-type light sources such as flourescent or mercury-vapour lights.*





White Balance Adjustment

This camcorder's Automatic Colour Temperature system senses the colour temperature of the ambient lighting for automatic white balance adjustment. However, precise colour adjustment is not possible under the following conditions:

- When an object is in various shades of the same colour.
- When a predominantly red or brown object is being shot outdoors.

In these cases, use the camcorder's built-in preset filters for white balance adjustment.

1 SELECT MODE

Press **MWB** (Manual White Balance) until the required indication appears in the viewfinder.

"☁" .... Outdoors on cloudy day
"☀" .... Outdoors on sunny day
"💡" .... Light source is halogen or tungsten lamp
"MWB" .... With a memorized personal White Balance setting (see below)

MWB sets the colour temperature for the subject's light source so you can shoot with natural colours that are unaffected by surroundings, even when there are multiple subjects with different colour temperatures.

1 ADJUST FOCUS

Point the camcorder at a white, flat object such as a sheet of white paper, and adjust focus manually (☞ pg. 19).

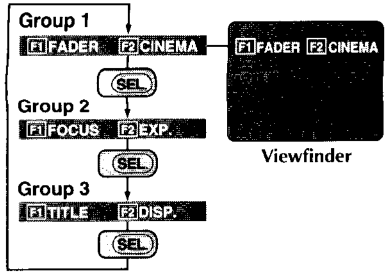
2 ADJUST WHITE BALANCE

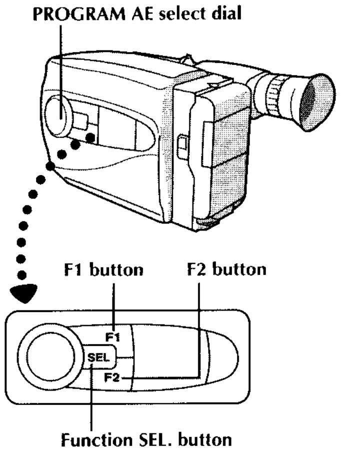
Press **MWB** until "MWB" appears, then press and hold **MWB** for more than 3 seconds.

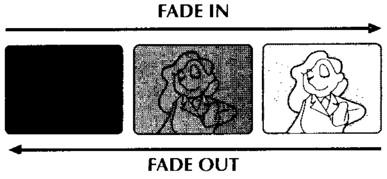
- "MWB" blinks in the viewfinder during adjustment, then stops blinking but stays lit when adjustment is complete.

NOTES:

- *To switch to automatic white balance adjustment, press **MWB** until the indication disappears, or turn the **PROGRAM AE** dial to LOCK.*
- *Re-adjust the White Balance Mode when the lighting has changed, when the camcorder has been turned on and off again, or when the **PROGRAM AE** dial's position has been changed.*
- *It is helpful to connect your camcorder to a colour monitor when adjusting the white balance ("BASIC CONNECTIONS" ☞ pg. 27).*
- *When adjusted by putting coloured paper in front of the subject in step **2**, this unit makes its colour temperature standard for automatic white balance. So you can enjoy shooting with different colours. For example, when adjusting with red, blue or yellow colours, the image becomes the colour which aproximates to green, orange or purple respectively.*


Group 1
F1 FADER F2 CINEMA
SEL
Group 2
F1 FOCUS F2 EXP.
SEL
Group 3
F1 TITLE F2 DISP.
SEL
F1 FADER F2 CINEMA
Viewfinder


PROGRAM AE select dial
F1 button
F2 button
F1
SEL
F2
Function SEL. button


FADE IN
FADE OUT

INTELLIGENT FUNCTION CONTROL

This feature makes it easier for you to make selections during the following modes: **Fader, Cinema, Manual Focus Adjust, Exposure Control, Display**, and **Instant Title**.

1 PREPARATION

Set the **PROGRAM AE** dial to any position except LOCK.

2 SELECT MODE

Press **Function SEL.** until the required function's indication appears in the viewfinder.

3 ENTER SELECTION

Press either **F1** or **F2** (the one to the immediate left of the desired function name).

NOTE:

*If you set the **PROGRAM AE** dial to LOCK, F1 and F2 disappear from the viewfinder, indicating that IFC (Intelligent Function Control) is unusable.*

Fader

This feature allows smooth fade-in and fade-out to black blank screen. Fade-in works at recording start, and fade-out works at recording end or when you enter Record–Standby mode.

1 SELECT MODE

Press **Function SEL.** until "FADER" appears to the right of F1.

2 ENGAGE FADE–STANDBY MODE

Press **F1** to engage the Fade–Standby mode. "FADER"appears in the viewfinder.

3 START RECORDING

Press Recording Start/Stop to start recording and activate fade-in.

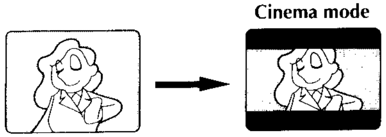
OR . . .

END RECORDING

Press Recording Start/Stop to end recording and engage fade-out.

NOTES:

- *Pressing and holding the Recording Start/Stop button allows you to record a black blank screen.*
- *The screen becomes slightly reddish when the Fader is used with Sepia (☞ pg. 14).*
- *With the Electronic fog filter mode (☞ pg. 14) engaged, the image fades in/out to a white screen.*


Cinema mode

Cinema

This feature allows you to record black bars at the top and bottom of the screen to produce a cinema-like "wide-screen" effect.

1 SELECT MODE

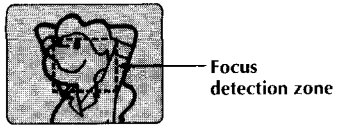
Press **Function SEL.** until "CINEMA" appears to the right of F2.

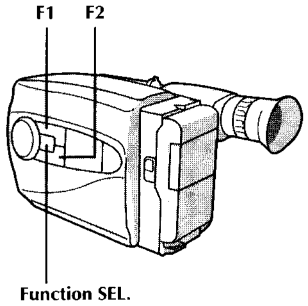
2 ENGAGE CINEMA MODE

Press **F2**.

3 RESTORE NORMAL SCREEN

Press **F2** again while "CINEMA" appears next to F2 in the viewfinder.





Focusing

Auto Focus

The camcorder's Full Range AF system offers continuous shooting ability from close-up to infinity. However, correct focus may not be obtainable in the situations listed below (in these cases use manual focusing):

- When two subjects overlap in the same scene.
- When illumination is low.*
- When the subject has no contrast (difference in brightness and darkness), such as a flat, one-colour wall, or a clear, blue sky.*
- When a dark object is barely visible in the viewfinder.*
- When the scene contains minute patterns or identical patterns that are regularly repeated.

* The low-contrast warning "▲◀ ▶▲" appears in the viewfinder.

Focus Lock

This feature locks the focus in place, which is especially helpful in the following situations:

- When things pass between your subject and the camcorder. Engage the focus lock function to lock your subject in before recording.
- When you want your subject to be focused, and to appear in a corner of the screen. First, centre on the subject and focus using auto focus mode. Then engage the focus lock function and move the camcorder until the subject is where you want it.

1 SELECT MODE

Press **Function SEL.** until "FOCUS" appears to the right of F1.

2 LOCK FOCUS

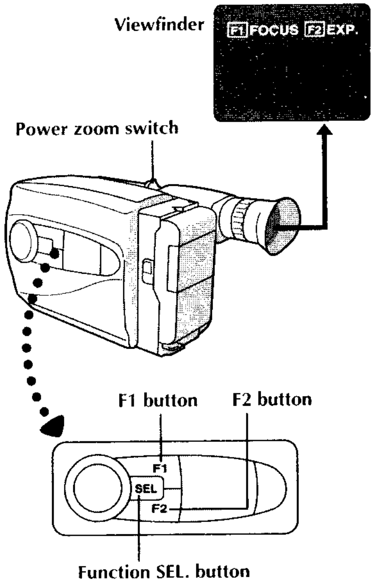
Press **F1**. The focus lock indication "◀ ▶" appears in the viewfinder.

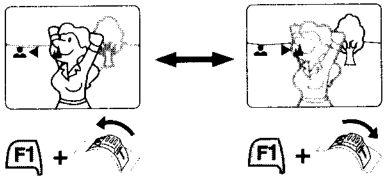
3 RELEASE FOCUS LOCK

Press **F1**. Focus lock is immediately released. The focus lock indication disappears.

NOTES:

- *If the lens is smeared or blurred, accurate focusing is not possible. Keep the lens clean, wiping with a piece of soft cloth if it gets dirty. When condensation occurs, wipe with a soft cloth or wait for it to dry naturally.*
- *When shooting a subject close to the lens, zoom-out first (☞ pg. 11). If zoomed-in in the auto focus mode, the camcorder could automatically zoom out depending on the distance between the camcorder and the subject.*





Manual Focus

NOTE:

You should already have made the necessary viewfinder adjustments (☞ pg. 7). If you haven't, do so before continuing.

1 SELECT MODE

Press **Function SEL.** until "FOCUS" appears to the right of F1.

2 ADJUST FOCUS

Ⓐ TO FARTHER SUBJECT

While holding down **F1**, slide the power zoom switch to T. The Manual Focus indications "▲ ▶▲" appear and "▶" blinks.

Go to step **3**.

Ⓑ TO NEARER SUBJECT

While holding down **F1**, slide the power zoom switch to W. The Manual Focus indications "▲◀ ▲" appear and "◀" blinks.

Go to step **3**.

3 LOCK FOCUS

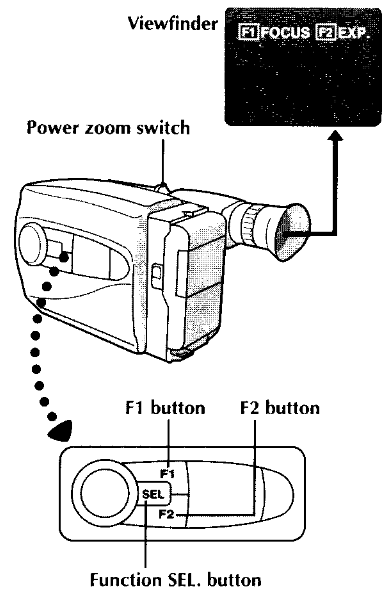
Release the power zoom switch. The focus indication is replaced by the focus lock indication "◀ ▶" and the adjusted focus is locked in.

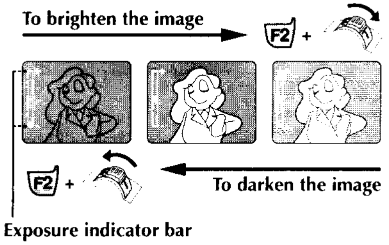
4 RELEASE MANUAL FOCUS MODE

Press **F1**. The Manual Focus mode is immediately released and the focus lock indication disappears.

NOTES:

- *Be sure to focus the lens in the maximum telephoto position when you use the Manual Focus mode. If you focus in on a certain subject in the wide-angle position, sharply focused images cannot be obtained when zoomed up because the depth-of-field is reduced at longer focal lengths.*
- *Two manual focusing speeds are available. For slow-speed, push the switch slightly and hold that position. For fast-speed, push the switch fully.*
- *When the focus level cannot be adjusted any farther or closer, "▲" or "▲" will blink.*


Viewfinder
F1 FOCUS F2 EXP.
Power zoom switch
F1 button
F2 button
F1
SEL
F2
Function SEL. button


To brighten the image
F2 +
F2 +
To darken the image
Exposure indicator bar

Exposure Control

This feature automatically adjusts the iris for the best available picture quality, but you can override and make the adjustment manually.

1 SELECT MODE

Press **Function SEL.** until "EXP." appears to the right of F2.

2 BRIGHTEN IMAGE

While holding down **F2**, slide the power zoom switch to T. The Exposure indicator bar appears in the viewfinder.

OR . . .

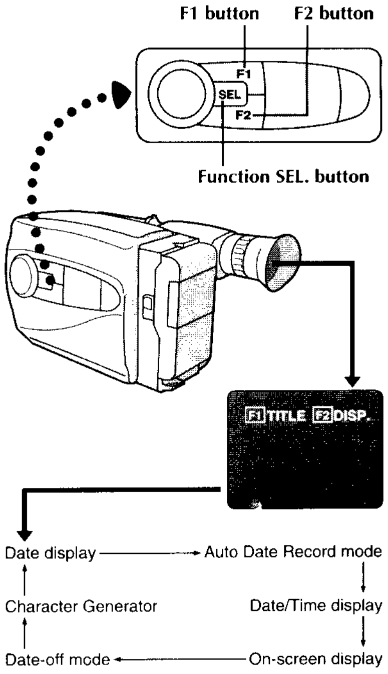
DARKEN IMAGE

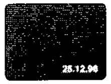
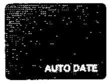
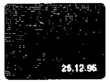
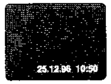
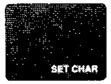
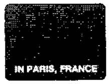
While holding down **F2**, slide the power zoom switch to W. The Exposure indicator bar appears in the viewfinder.

When you want to return to the factory setting . . .

3 RESTORE INITIAL SETTING

Press **F2**. The standard setting is immediately restored and the Exposure indicator bar disappears.


F1 button
F2 button
F1
SEL
F2
Function SEL. button
F1 TITLE F2 DISP.
Date display
Auto Date Record mode
Character Generator
Date/Time display
Date-off mode
On-screen display

Date display	Auto Date Record mode	
	 Auto date record mode	 Auto date record executed
Date/Time display	**Character Generator**	
 25.12.96 10:50	 No Characters stored	 IN PARIS, FRANCE Example of stored characters

NOTES:

- *In the On-Screen Display mode, the date is displayed and recorded.*
- *The on-screen display is not available during recording.*

Date/Time Character Insert

This feature allows you to display date, time and characters in your viewfinder and on a connected colour monitor, record them manually or automatically, and even make your own titles.

NOTE:

You should already have performed the Date/Time Setting procedure (☞ pg. 6). If you haven't, do so before continuing.

DISPLAY

1 SELECT DISPLAY

Press **Function SEL.** until "DISP." appears to the right of F2.

2 CHOOSE DISPLAY MODE

Press **F2** while in Record–Standby to cycle through the modes as shown in the illustration at left.

NOTES:

- *The selected display can be recorded.*
- *If you don't want to record the display, select Date-off mode before shooting.*
- *If you want to delete the display during shooting, press **F2**.*
- *If you want to call back a deleted display, engage the Record–Standby mode and then select the desired display mode using **F2**.*

AUTO DATE RECORD

Your camcorder automatically records the day, month and year for about 5 seconds after recording is initiated in the following situations:
- After changing the date.
- After loading a cassette.
- After Auto Date Record mode is selected by pressing **F2**. In this mode, the month, day and year are replaced after 5 seconds with "AUTO DATE".

NOTES:

- *Setting **PROGRAM AE** to LOCK always engages this mode, and disables all other modes.*
- *In the Auto Date Record mode, if the date changes while you're shooting, the date indication is recorded for about 5 seconds from that point. It is not recorded during any other recordings made on that day.*

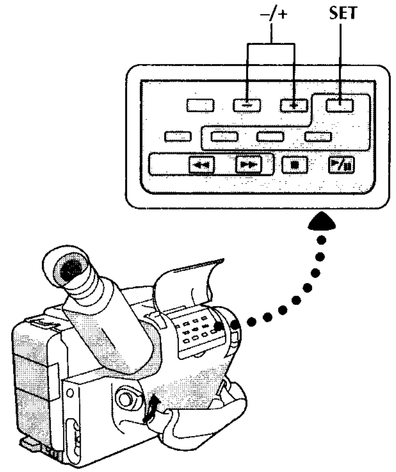
ON-SCREEN DISPLAY

1 CONNECT CAMCORDER TO MONITOR

Connect the camcorder to a monitor as instructed in "BASIC CONNECTIONS" (☞ pg. 27).

2 DISPLAY VIEWFINDER INDICATIONS

Press **F2** until the indications appear on the connected monitor.



Character Generator

1 SELECT MODE

Press **Function SEL.** until "DISP." appears to the right of F2.

2 SET CHARACTER OR TITLE

Press **F2** until "SET CHAR" or a previously stored title appears in the viewfinder.

3 ACCESS CHARACTER MODE SCREEN

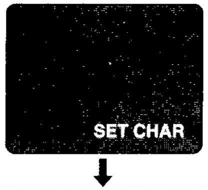
Press **SET**. A character grid appears in the view finder.

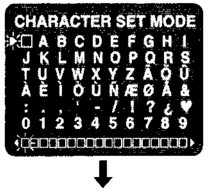
4 ENTER DESIRED CHARACTERS

Press + or – to move the cursor on the character grid to the desired character, then press **SET** to enter. The selected characters appears at the bottom of the screen. When you're done, press **SET** as many times as necessary to exit the screen. The title you made appears at the bottom of the screen.

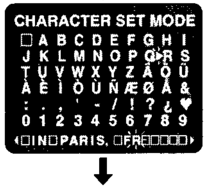
NOTES:

- *You can store up to 18 characters.*
- *You can only make and store one title at a time. To replace it, repeat the procedure.*
- *To create a space between two characters in a title you make, choose "□" on the CHARACTER SET MODE screen.*

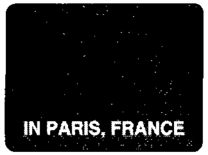



CHARACTER SET MODE
□ A B C D E F G H I
J K L M N O P Q R S
T U V W X Y Z Ä Ö Ü
À È Ì Ò Ù Ñ Æ Ø Å &
: . , ' - / ! ? ¿ ♥
0 1 2 3 4 5 6 7 8 9
◂□□□□□□□□□□□□□□□□□□▸

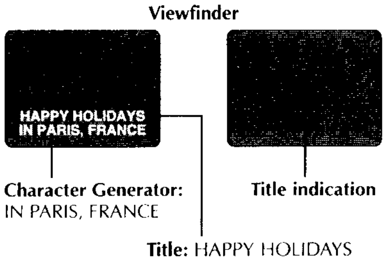
CHARACTER SET MODE screen


CHARACTER SET MODE
□ A B C D E F G H I
J K L M N O P Q R S
T U V W X Y Z Ä Ö Ü
À È Ì Ò Ù Ñ Æ Ø Å &
: . , ' - / ! ? ¿ ♥
0 1 2 3 4 5 6 7 8 9
◂□IN□PARIS, □FR□□□□□▸

CHARACTER SET MODE screen


IN PARIS, FRANCE

Example of Character Generator & Title


Viewfinder
HAPPY HOLIDAYS
IN PARIS, FRANCE
Character Generator: IN PARIS, FRANCE
Title indication
Title: HAPPY HOLIDAYS

Instant Titles

The camcorder has eight preset titles in memory. You can superimpose one of them above a previously stored title as shown in the illustration to the left.
The preset titles appear in this order: HAPPY BIRTHDAY, HAPPY HOLIDAYS, OUR FAMILY, MOVIE STAR, PARTY TIME, MERRY CHRISTMAS, WEDDING DAY, CONGRATULATIONS.

1 SELECT MODE

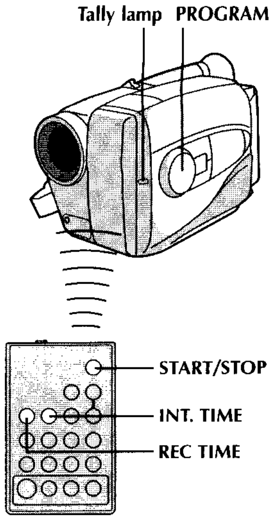
Press **Function SEL.** until "TITLE" appears to the right of F1.

2 SELECT PRESET TITLE

Engage the Record-Standby mode, then press **F1** to cycle through the preset titles until the desired title is displayed.

NOTES:

- *To delete the Instant Title during recording, press **F1**.*
- *To recall a title, engage the Record-Standby mode and then press **F1** to select the desired title.*
- *To display a title you made in the position usually occupied by an Instant Title, cycle through in step **2** above until your title appears (after "CONGRATULATIONS"). You can superimpose two personal titles on the scene being shot.*



RM-V704U
(provided with GR-AX460, optional for GR-AX360/AX260)

Self-Timer

You can set the delay between pressing Recording Start/Stop and the actual start of recording. If you secure the camcorder, you (or whomever is operating the camcorder) can enter the scene before recording starts.

NOTE:
You need the RM-V704U remote control unit to perform this procedure.

1 ENGAGE RECORD–STANDBY MODE

Make sure the lens cover is open, set the power switch to CAMERA.

2 SET TIME DELAY

On the RM-V704U, press **INT. TIME** to set the delay time. There are four choices, and they appear in the viewfinder in the following order (each time **INT. TIME** is pressed): 15S (15 seconds), 30S (30 seconds), 1MIN (1 minute) and 5MIN (5 minutes). Pressing again releases the Self-timer.

3 START DELAYED RECORDING

Press Recording Start/Stop. The tally lamp begins blinking, and the blinking speed increases about 5 seconds before recording starts. When recording begins, the lamp stops blinking but stays lit.

4 RELEASE SELF-TIMER MODE

To release when the tally lamp is not blinking, press **INT. TIME** continuously until "⏱" disappears. To release when the tally lamp is blinking, press Recording Start/Stop to stop the blinking, then press **INT. TIME** continuously until "⏱" disappears.

NOTE:
*If the **PROGRAM AE** dial is set to "⏱", 15S is automatically selected.*

Animation

Give stationary scenes or objects an illusion of movement. This function allows you to shoot a series of pictures, each slightly different, of the same object for a brief period of time.

NOTE:
You need the RM-V704U remote control unit to perform the following procedure.

1 ENGAGE RECORD–STANDBY MODE

Make sure the lens cover is open, then set the power switch to CAMERA.

2 SET RECORDING TIME

Press **REC TIME** on the remote control. Three choices are available, and they appear in the following order (each time **REC TIME** is pressed): 1/4S (one-fourth of a second), 1/2S (one-half of a second) and 1S (one full second). Press again to release the Animation mode.

3 START RECORDING

Press Recording Start/Stop after focusing on the subject. The recording stops automatically after the selected period of time.

4 ASSEMBLE SERIES OF PICTURES

Repeat steps **2** and **3** for the desired number of pictures.

5 CHECK YOUR WORK

Play back the series of pictures to see if the results were satisfactory.

6 RELEASE ANIMATION MODE

Press **REC TIME** until "🎬" disappears from the viewfinder.

NOTES:
- *For best results, make sure the camcorder is secured when shooting.*
- *If the **PROGRAM AE** dial is set to Self-Timer mode, Animation is cancelled and Self-Timer mode is engaged with 15S selected.*
- *Fade-in/out cannot be performed during Animation shooting.*

Time-Lapse

You can record sequentially at preset time spans. Leaving the camcorder aimed at a specific subject, you can record subtle changes over an extended period of time.

NOTE:
You need the RM-V704U remote control unit to perform the following procedure.

1 ENGAGE RECORD–STANDBY MODE

Make sure the lens cover is open, then set the power switch to CAMERA.

2 SET RECORDING TIME

Press **REC TIME** on the remote control. There are three choices available, and they appear in the following order (each time **REC TIME** is pressed): 1/4S, 1/2S and 1S. Press again to reset.

3 SET INTERVAL BETWEEN RECORDINGS

Press **INT. TIME** on the remote control. There are four choices available, and they appear in the following order (each time **INT. TIME** is pressed): 15S, 30S, 1MIN, and 5MIN. Press again to reset.

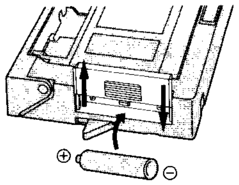
4 START TIME-LAPSE RECORDING

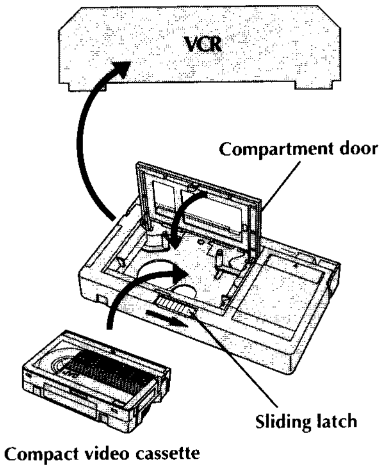
Press Recording Start/Stop. Recording and intervals alternate automatically.

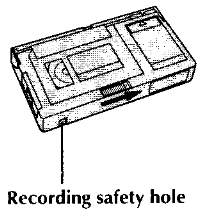
5 RELEASE TIME-LAPSE MODE

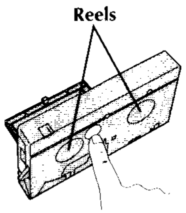
To release when the tally lamp is not blinking, press **INT. TIME** and **REC TIME** repeatedly until "🎬" and "⏱" disappear. To release when the tally lamp is blinking, press Recording Start/Stop to stop the blinking, then press **INT. TIME** and **REC TIME** repeatedly until "🎬" and "⏱" disappear.

NOTES:
- *Fade-in/out cannot be performed during Time-Lapse shooting.*
- *For best results, keep the camcorder secured while shooting.*
- *If, during steps **2** and **3**, the **PROGRAM AE** dial is set to the Self-Timer mode, the Self-Timer mode is engaged with 15S selected.*




VCR
Compartment door
Sliding latch
Compact video cassette


Recording safety hole



Cassette Adapter

Use this to play back a VHS-C video cassette recorded with this camcorder. It is fully compatible with any VHS video cassette recorder. The C-P7U adapter is battery powered and automatically performs tape loading and unloading.

1 INSERT BATTERY

Slide the battery cover up to remove it, and install one "R6(AA)" size battery as shown in the illustration at left. Then reattach the cover.

2 INSERT CASSETTE IN ADAPTER

Slide the latch to open the adapter compartment door, then insert the cassette and close the compartment door.

3 PLAY BACK ON CONNECTED VCR

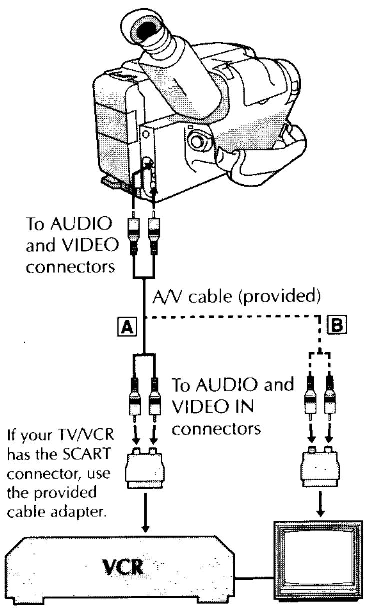
Load the cassette adapter into the VCR and play the tape back as you would any other.

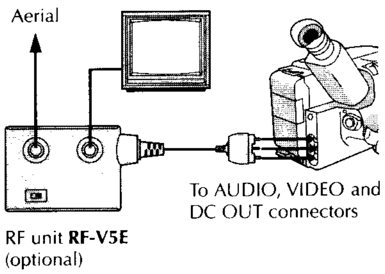
4 REMOVE CASSETTE FROM ADAPTER

Slide the latch and the compartment door opens automatically. Then insert your finger in the hole on the underside of the adapter as shown in the illustration at left, push up and remove the cassette.

NOTES:

- *During tape loading and unloading, do not touch the reels for safety and tape protection.*
- *During special-effect playback (slow motion, still frame, etc.), the picture may vibrate or noise bars may appear on the screen.*
- *To record on a VCR using a compact cassette and the adapter, cover the adapter's recording safety hole with adhesive tape.*


To AUDIO and VIDEO connectors
A/V cable (provided)
A
B
To AUDIO and VIDEO IN connectors
If your TV/VCR has the SCART connector, use the provided cable adapter.
VCR


Aerial
To AUDIO, VIDEO and DC OUT connectors
RF unit **RF-V5E**
(optional)

NOTES:

- *It is recommended to use the AC Power Adapter/Charger as the power supply instead of the battery pack.*
- *To monitor the picture and sound from the camcorder without inserting a tape, set the camcorder's power switch to CAMERA, then set your TV to the appropriate input mode.*
- *If you have a TV or speakers that are not specially shielded, do not place the speakers adjacent to the TV as interference will occur in the camcorder playback picture.*

There are three basic types of connections. When making the connections, refer also to your VCR and TV instruction manuals.

Connection To A VCR [A] (Editing, Dubbing and Playback)

NOTE:
Use the provided A/V cable.

1 CONNECT CAMCORDER TO VCR

As shown in the illustration at left, connect the provided A/V cable. between the AUDIO and VIDEO connectors on the camcorder and those on the VCR.

2 SUPPLY POWER

Turn on the camcorder, the VCR and the TV.

3 SELECT MODE

Set the VCR to its AUX input mode, and set the TV to its VIDEO mode.

Connection To A TV With A/V Input Connectors [B] (Playback ONLY)

NOTE:
Use the provided A/V cable.

1 CONNECT CAMCORDER TO TV

As shown in the illustration at left, connect the provided A/V cable. between the AUDIO and VIDEO connectors on the camcorder and those on the TV.

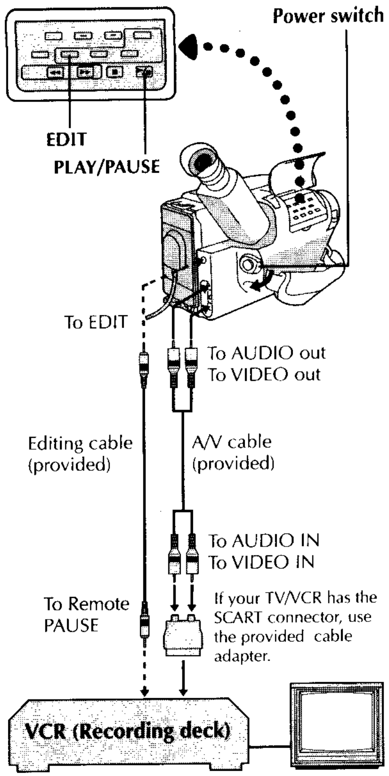
2 SELECT MODE

Set the TV to its VIDEO or AV mode (as specified in its instructions).

Connection To A TV With NO A/V Input Connectors (Playback ONLY)

NOTE:
Use the optional RF-V5E RF unit.

* Refer to the RF-V5E instruction manual for connection procedure.



Tape Dubbing

1

CONNECT EQUIPMENT

Following the illustration at left, connect the camcorder and the VCR. If you have a Remote PAUSE terminal, use the editing cable to connect it to the camcorder and the VCR. (See "NOTES" below for details.)

2

PREPARE FOR DUBBING

Set the camcorder's power switch to PLAY, turn on the VCR's power, and insert the appropriate cassettes in the camcorder and the VCR.

3

SELECT VCR MODE

Engage the VCR's AUX and Record-Pause modes.

4

FIND EDIT-IN POINT

Engage the camcorder's Play mode to find a spot just before the edit-in point. Once it's reached, press **PAUSE** on the camcorder.

5

START EDITING

Press **EDIT** on the camcorder and engage the VCR's Record mode.

6

STOP EDITING TEMPORARILY

Engage the VCR's Record-Pause mode and press **PAUSE** on the camcorder.

7

EDIT MORE SEGMENTS

Repeat steps **4** through **6** for additional editing, then stop the VCR and camcorder when finished.

NOTES:

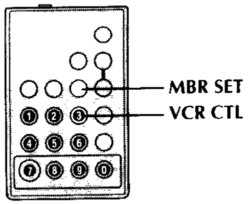
- *When using a Remote PAUSE terminal, pressing EDIT on the camcorder in step **5** automatically engages the VCR's Record mode.*
- *When using a Remote PAUSE terminal, you can access a function called Master Edit Control System. Before beginning, reset the camcorder's counter to "0:00:00" at an edit-out point. When the tape reaches this point (remember there's a small margin of error) during editing, the camcorder and VCR pause automatically. However, some VCRs are not compatible with the Master Edit Control System.*

Random Assemble Editing [R.A.Edit]

Create edited videos easily using your camcorder as the source player. You can select up to 8 "cuts" for automatic editing, in any order you like. R.A. Edit is more easily performed when the RM-V704U* MBR (Multi-Brand Remote) is set to operate with your brand of VCR (see chart on the next page), but can also be performed by operating the VCR manually.

* RM-V704U is provided with GR-AX460, optional for GR-AX360/AX260.

CONTINUED ON NEXT PAGE



RM-V704U
(provided with GR-AX460,
optional for GR-AX360/AX260)

VCR CODE LIST

VCR BRAND NAME	BUTTONS	
	(A)	(B)
AKAI	❻	❷
	❻	❹
	❼	❼
BLAUPUNKT	❶	❸
FERGUSON	❾	❼
	❾	❽
	❸	❷
GRUNDIG	❶	❹
	❸	❹
HITACHI	❻	❻
	❻	❸
JVC A	❾	❶
B	❾	❻
C	❾	❸
MITSUBISHI	❻	❼
	❻	❽
NEC	❸	❼
	❸	❽
PANASONIC	❶	❸
	❶	❼
	❶	❶
	❾	❹
	❶	❽
PHILIPS	❶	❾
	❾	❺
	❶	❶
	❾	❹
	❾	❶
	❾	❻
	❶	❷
	❸	❸
SANYO	❸	❻
	❸	❺
SELECO, REX	❾	❶
	❾	❻
SHARP	❶	❺
	❶	⓿
SONY	❻	❺
	❻	⓿
	❸	❾
	❸	❶
THOMSON, TELEFUNKEN, SABA, NORDMENDE	❾	❶
	❾	❻
	❾	❼
	❸	❷
TOSHIBA	❻	❾
	❻	❶

SET REMOTE/VCR CODE

1

SET REMOTE TO OPERATE VCR

Turn off the power to the VCR and point the remote toward the VCR's infrared sensor. Then, referring to the chart at left, press and hold **MBR SET**, and press button (A) and then (B).

- The code is automatically set once you release the **MBR SET** button, and the VCR's power comes on.

2

OPERATE THE VCR

Make sure the VCR's power is on. Then, while holding **VCR CTL**, press the button on the remote for the desired function. The functions the remote can control are PLAY, STOP, PAUSE, FF, REW and VCR REC STBY (you don't need to press **VCR CTL** for this one).

You're now ready to try Random Assemble Editing.

IMPORTANT

Although the MBR is compatible with JVC VCRs and those of many other makers, it may not work with yours or may offer limited functions.

NOTES:

- *If the VCR's power doesn't come on in step **1**, try another code from the chart.*
- *Some brands of VCR don't come on automatically. In this case, turn the power on manually and try step **2**.*
- *If the RM-V704U is not able to control the VCR, use the controls on the VCR.*

MAKE CONNECTIONS

1

CONNECT TO . . .

🄰 JVC VCR EQUIPPED WITH REMOTE PAUSE TERMINAL

Connect the editing cable to the Remote PAUSE terminal.

🄱 JVC VCR NOT EQUIPPED WITH REMOTE PAUSE TERMINAL

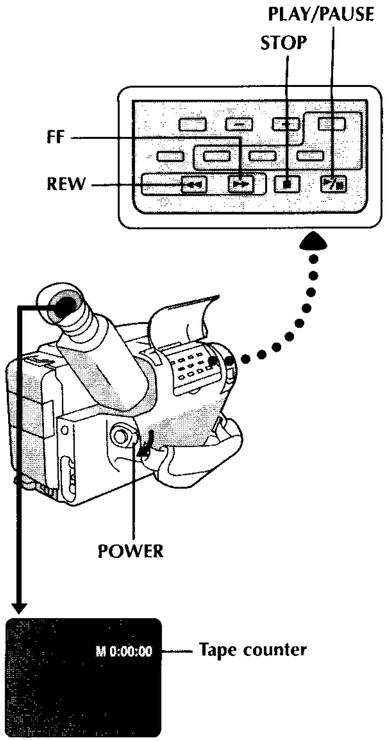
Connect the editing cable to the R.A.EDIT connector.

🄲 NON-JVC VCR WITH NEITHER

Connect the editing cable to the RM-V704U's Pause-In jack.

All other connections are as shown in the illustration on page 32.

CONTINUED ON NEXT PAGE



NOTE:

Make sure you connect your camcorder as directed in "BASIC CONNECTIONS" (☞ pg. 27).

1 LOAD A CASSETTE

Load as you did in the recording procedure.

2 SELECT MODE

Set the power switch to PLAY. The Power On indicator lights.

3 PLAYBACK

Press **PLAY/PAUSE**. The playback picture appears in the viewfinder and the connected TV.

4 STOP PLAYBACK

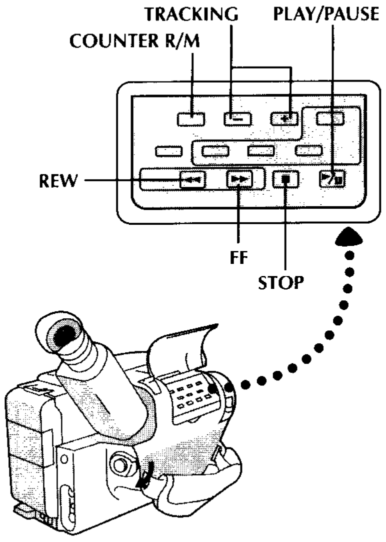
Press **STOP**.

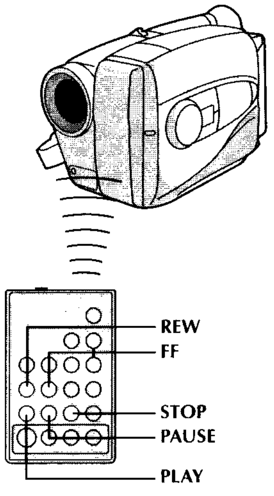
Rewind or Fast-forward the Tape

Press **REW** to rewind, or **FF** to fast-forward the tape during stop mode.

NOTE:

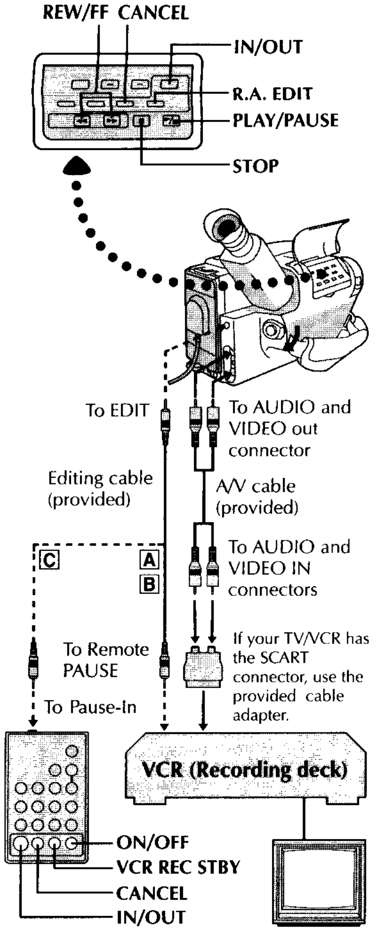
The camcorder shuts off automatically after about 5 minutes in STOP mode. To turn on again, set the power switch to POWER OFF, then to PLAY.



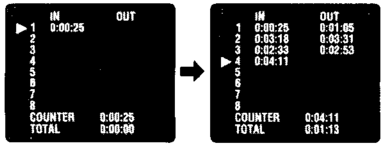


RM-V704U
(provided with GR-AX460, optional for GR-AX360/AX260)

FEATURE:	**Manual Tracking**
PURPOSE:	To eliminate noise bars that appear on the screen.
OPERATION:	1) Press either **TRACKING** button as many times as necessary for best picture.
NOTES:	● *To reset TRACKING to the original preset, press both* ***TRACKING*** *buttons simultaneously.* ● *Manual Tracking may not work with tapes recorded on other VCRs or camcorders.*
FEATURE:	**Still Playback**
PURPOSE:	To pause during playback.
OPERATION:	1) Press **PLAY/PAUSE** during playback. 2) To resume normal playback, press **PLAY/PAUSE** again.
NOTE:	*Noise bars appear and pictures may become monochrome during Still Playback. This is normal.*
FEATURE:	**Shuttle Search**
PURPOSE:	To allow high-speed search in either direction.
OPERATION:	*Forward Search* 1) Press **FF** during playback. *Reverse Search* 1) Press **REW** during playback.
NOTE:	*Noise bars appear and pictures may become monochrome in Shuttle Search. This is normal.*
FEATURE:	**Counter Memory Function**
PURPOSE:	To make it easier to locate a specific tape segment.
OPERATION:	1) Press **COUNTER R/M** and hold for more than 2 seconds. The counter resets to "0:00:00". 2) Press **COUNTER R/M**. "M" appears. 3) After recording or playback, press **STOP**, then **REW**. The tape automatically stops at or close to 0:00:00. 4) Press **PLAY/PAUSE** to start playback.
NOTES:	● *The counter memory functions in the FF and REW modes.* ● *To disable Counter Memory Function, press* ***COUNTER R/M*** *so the "M" disappears.*


REW/FF CANCEL
IN/OUT
R.A. EDIT
PLAY/PAUSE
STOP
To EDIT
To AUDIO and VIDEO out connector
Editing cable (provided)
A/V cable (provided)
To AUDIO and VIDEO IN connectors
C
A
B
To Remote PAUSE
If your TV/VCR has the SCART connector, use the provided cable adapter.
To Pause-In
VCR (Recording deck)
ON/OFF
VCR REC STBY
CANCEL
IN/OUT

RM-V704U
(provided with GR-AX460,
optional for GR-AX360/AX260)



```
     IN        OUT
▶1   0:00:25
 2
 3
 4
 5
 6
 7
 8
 COUNTER   0:00:25
 TOTAL     0:00:00
```

```
     IN        OUT
 1   0:00:25   0:01:05
 2   0:03:18   0:03:31
 3   0:02:33   0:02:53
▶4   0:04:11
 5
 6
 7
 8
 COUNTER   0:04:11
 TOTAL     0:01:13
```

2 PREPARE CAMCORDER

Insert a recorded tape and set the power switch to PLAY.

3 PREPARE VCR

Turn the power on, insert a recordable tape and engage the AUX mode (refer to VCR's instructions).

SELECT SCENES

1 ACCESS R.A. EDIT COUNTER DISPLAY

Press **PLAY/PAUSE**, then press **R.A. EDIT** and the counter display appears in the viewfinder and the screen of the connected TV.

2 REGISTER BEGINNING OF SCENE

Press **REW** or **FF** to locate the beginning of a scene you want, then press **IN/OUT** to register that point. The data appears under IN on the display.

3 REGISTER END OF SCENE

Press **REW** or **FF** to locate the end of the scene and press **IN/OUT** to register it. The data appears under OUT on the display. The total time of the registered scene(s) is displayed at the bottom of the screen.

4 REGISTER ADDITIONAL SCENES

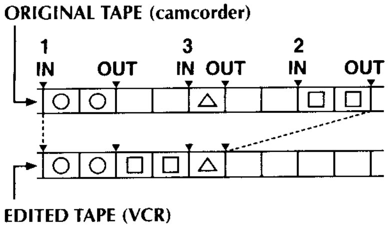
Repeat steps **2** and **3** for each additional scene (as many as 8).

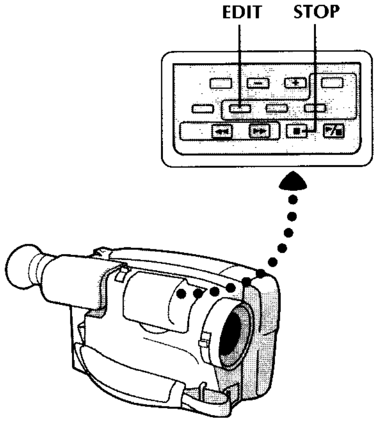
5 MAKE CORRECTIONS

Press **CANCEL** during steps **2** and **3** to erase the most recently registered point.

NOTES:

- *The RM-V704U can be used to operate other camcorder functions as well. Point the RM-V704U at the camcorder's remote sensor and press any of the following buttons (function appears in parentheses):*
  - *— ON/OFF (camcorder R.A. EDIT)*
  - *— IN/OUT (camcorder IN/OUT)*
  - *— CANCEL (camcorder CANCEL)*
- *There must be at least one second between an in-point and its corresponding out-point.*
- *The camcorder prerolls during R.A. Edit, so there must be at least 15 seconds of recording material prior to any in-point.*
- *Blank portions of tape cannot be registered as in-points or out-points.*
- *If it takes more than 5 minutes to search for an in-point, the VCR's Record-Pause mode is cancelled and editing doesn't take place.*
- *Pressing **R.A. EDIT** clears all in- and out-points from memory.*
- *Leave a small margin for error around each in-point to ensure the scene is recorded in its entirety.*


ORIGINAL TAPE (camcorder)
1
3
2
IN
OUT
IN
OUT
IN
OUT
EDITED TAPE (VCR)



AUTOMATIC EDITING TO VCR

1 ENGAGE VCR'S RECORD–PAUSE MODE

Point the remote control toward the VCR's infrared sensor and press VCR REC STBY, or manually engage the VCR's Record-Pause mode.

2 BEGIN AUTOMATIC EDITING

Press **EDIT** on the camcorder, and the previously selected scenes are copied to the VCR in the specified order.

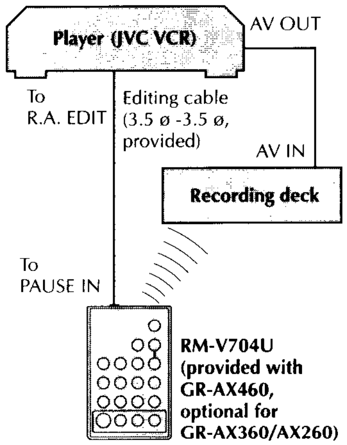
3 END AUTOMATIC EDITING

When all selected scenes have been copied, the camcorder and VCR enter the still or pause mode. Press **STOP** on both units.

NOTES:

- *If you performed step **1C** on page 31, keep the remote control pointed at the VCR during editing.*
- *The on-screen display only appears while the camcorder searches for each scene.*
- *To dub a copy of the camcorder's (source) tape, perform R.A. EDIT by specifying only one in-point (and no out-point). The contents of the tape from the specified in-point to the end of the tape are automatically copied.*
- *There may be noise at in- or out-points on the edited tape with certain VCRs.*

SUPPLEMENTAL INFORMATION ON THE REMOTE CONTROL


Player (JVC VCR)
AV OUT
To R.A. EDIT
Editing cable (3.5 ø -3.5 ø, provided)
AV IN
Recording deck
To PAUSE IN
RM-V704U (provided with GR-AX460, optional for GR-AX360/AX260)

Using the RM-V704U remote control, it is also possible to perform deck-to-deck Random Assemble Editing. The playback deck must be an R.A. Edit-capable JVC VCR. The recording deck can be...

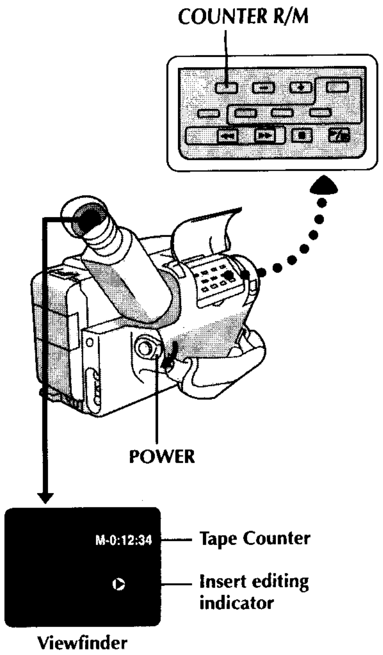
- ■ a VCR other than JVC, or
- ■ a JVC VCR which has **neither** a Remote PAUSE nor an R.A. EDIT connector

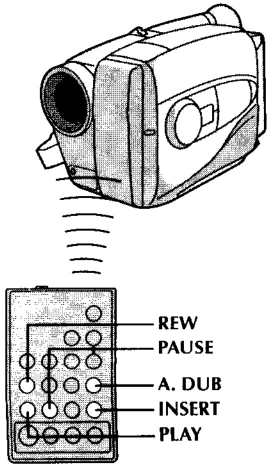
How to use:

- — Connect the playback deck and RM-V704U as shown on the left.
- — Set the RM-V704U to correspond to the brand of the recording deck. (☞ P. 31)
- — For Random Assemble Editing procedure, please refer to the instruction manual of the JVC VCR you are using as the playback deck.

Notes:

- ■ RM-V704U cannot be used to control the playback deck.
- ■ RM-V704U is capable of controling basic operations of the recording deck. While pressing VCR CTL, press PLAY, STOP, PAUSE, FF or REW for these functions. (Not possible with some brands and models). Other buttons cannot be used.
- ■ To put the recording deck in the Record-Pause mode, use the controls on the recording deck itself.





RM-V704U
(provided with GR-AX460, optional for GR-AX360/AX260)

Insert Editing

You can record a new scene into a previously recorded tape, replacing a section of the original recording with minimal picture distortion at the in- and out-points. The original audio remains unchanged.

NOTE:

You need the RM-V704U remote control unit to perform the following procedure.

1 SELECT MODE

Set the power switch to PLAY.

2 FIND EDIT-OUT POINT

Locate the point and press **PAUSE** on the camcorder or the remote control.

3 RESET COUNTER

Press and hold **COUNTER R/M** for more than 2 seconds to reset the tape counter, then press for less than 1 second and make sure "M" appears in the viewfinder.

4 FIND EDIT-IN POINT

Press **REW** to go a little beyond the beginning of the scene you want to replace, press **PLAY** to view the recorded tape, and press **PAUSE** at exactly at the point where the new scene should start.

5 ENGAGE INSERT EDITING MODE

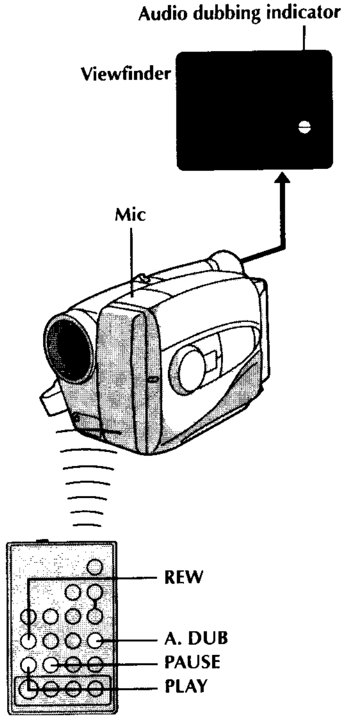
Press and hold **INSERT**, and press **PAUSE**. The Insert mode is engaged, and the scene the camcorder is aimed at appears on the screen.

6 BEGIN INSERT EDITING

Press Recording Start/Stop. When the counter reaches "0:00:00", editing stops automatically and the camcorder enters the playback mode.

NOTES:

- *Insert Editing may not work correctly if a blank segment exists in the recorded tape.*
- *The tape may stop slightly before or after the designated end point, and noise bars may appear. Neither indicates a defect in the unit.*
- *To edit onto a tape with the recording safety tab removed, cover the hole with adhesive tape.*
- *Only video signal is recorded in the Insert Editing mode. When the sound is to be recorded, press A. DUB and PAUSE simultaneously after Step **5**. When INSERT and PAUSE are pressed simultaneously again, the unit re-enters the Video-signal-only Recording mode.*
- *If the camcorder's mike is too close to the TV, or if the TV's volume is too high, whistling or howling may occur.*



RM-V704U
(provided with GR-AX460, optional for GR-AX360/AX260)

Audio Dubbing

You can record a new soundtrack on a prerecorded tape (normal audio only).

** Perform steps **1**, **2** and **3** of the Insert Editing procedure (☞ pg. 34) before continuing.

1 FIND EDIT-IN POINT

Press **REW** to go a little beyond the beginning of the scene onto which you want to dub new audio, press **PLAY** to view the recorded tape, then press **PAUSE** at exactly the point where dubbing should start.

2 ENGAGE AUDIO DUB STANDBY MODE

Press and hold **A. DUB**, and press **PAUSE**.

3 BEGIN AUDIO DUBBING

Press **PLAY**. When the counter reaches "0:00:00", Audio Dubbing stops automatically and the camcorder enters the playback mode.

NOTES:

- *Audio Dubbing may not work correctly if the tape contains blank segments.*
- *If the camcorder's mike is too close to the TV, or if the TV's volume is too high, whistling or howling may occur.*

Controls

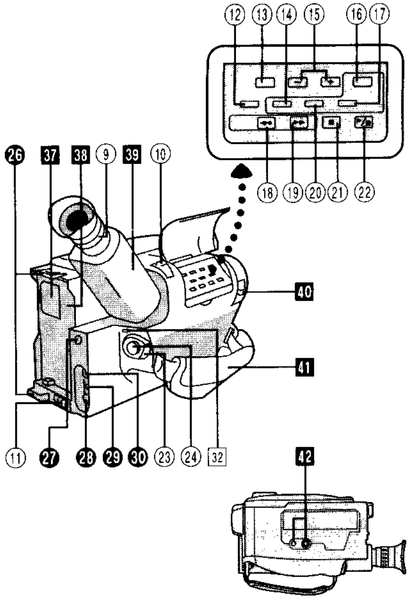
- ① PROGRAM AE Select Dial .... ☞ pg. 14
- ② F1 [Function 1] Button .... ☞ pg. 16
- ③ PUSH Button .... ☞ pg. 7
- ④ Function SEL. Button .... ☞ pg. 16
- ⑤ F2 [Function 2] Button .... ☞ pg. 16
- ⑥ EJECT Switch .... ☞ pg. 7
- ⑦ AUTO PAUSE ON/OFF Switch (GR-AX460 only) .... ☞ pg. 12
- ⑧ LIGHT ON/AUTO/OFF Switch (GR-AX460 only) .... ☞ pg. 13
- ⑨ Diopter Adjustment .... ☞ pg. 7
- ⑩ Power Zoom Switch .... ☞ pg. 11
- ⑪ BATT. [Battery] RELEASE Switch .... ☞ pg. 4
- ⑫ MWB [Manual White Balance] Button .... ☞ pg. 15
- ⑬ Tape Length [TAPE30•45] Select Button .... ☞ pg. 7
  COUNTER R [Reset]/M [Memory] Button .... ☞ pg. 29
- ⑭ EDIT Button .... ☞ pg. 30
- ⑮ DATE/TIME +/– Buttons .... ☞ pg. 6
  CHAR. [Character] SET +/– Buttons .... ☞ pg. 22
  TRACKING +/– Buttons .... ☞ pg. 29
- ⑯ DATE/TIME SET Button .... ☞ pg. 6
  CHAR. SET Button .... ☞ pg. 22
  R.A.EDIT IN/OUT Button .... ☞ pg. 32
- ⑰ R.A.EDIT Button .... ☞ pg. 32
- ⑱ REW Button .... ☞ pg. 28
  RETAKE R [Quick Review] Button .... ☞ pg. 11
- ⑲ FF Button .... ☞ pg. 28
  RETAKE F Button .... ☞ pg. 11
- ⑳ R.A.EDIT CANCEL Button .... ☞ pg. 32
- ㉑ STOP Button .... ☞ pg. 28
- ㉒ PLAY/PAUSE Button .... ☞ pg. 28
- ㉓ POWER Switch .... ☞ pg. 6
- ㉔ Recording Start/Stop Button .... ☞ pg. 8

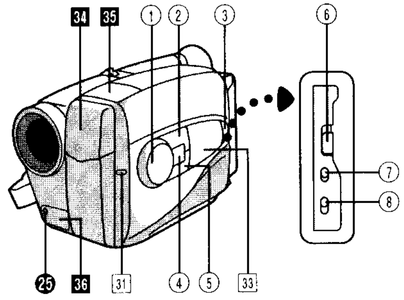
Connectors

- ㉕ REMOTE Jack (For connection of the RM-V20U wired remote control unit (optional).)
- ㉖ Shoulder Strap Eyelets .... ☞ pg. 8
- ㉗ EDIT Jack .... ☞ pg. 30
- ㉘ VIDEO Out Jack .... ☞ pg. 27
- ㉙ RF DC OUT Jack .... ☞ pg. 27
- ㉚ AUDIO Out Jack .... ☞ pg. 27

Indicators

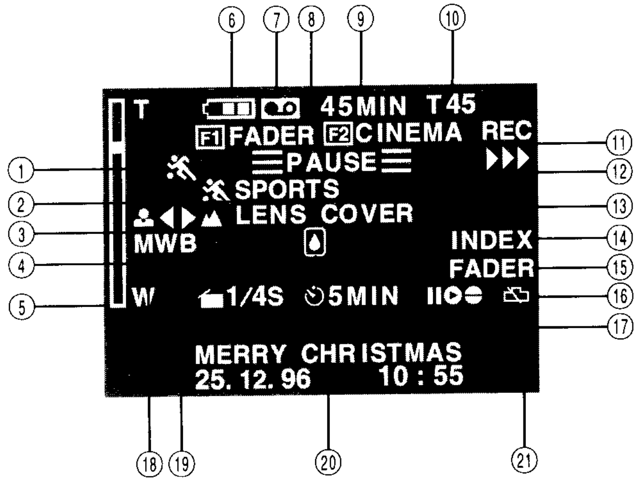
- [31] Tally Lamp .... ☞ pg. 10
- [32] Power On Indicator .... ☞ pg. 10
- [33] LCD window (GR-AX460 only)





Other Parts

- [34] Video light (GR-AX460 only) .... ☞ pg. 13
- [35] Microphone
- [36] Remote Sensor .... ☞ pg. 9
  (Be careful not to cover this area; built-in here is the sensor necessary for shooting.)
- [37] Clock Battery Compartment .... ☞ pg. 6
- [38] Battery Pack Mount .... ☞ pg. 4
- [39] Electronic Viewfinder .... ☞ pg. 7
- [40] LENS COVER Switch .... ☞ pg. 10
- [41] Grip Strap .... ☞ pg. 8
- [42] Tripod Mounting Socket .... ☞ pg. 8



Viewfinder Indications

- ①, ② PROGRAM AE Indicator .... ☞ pg. 14
  Displayed at ② for approx. 3 seconds when the PROGRAM AE select dial is switched from one position to another. Then only the indicator remains at ①.
- ③ Focus Indicator .... ☞ pg. 18
- ④ White Balance Mode Indicator .... ☞ pg. 15
- ⑤ Zoom Level Indicator .... ☞ pg. 11
  Exposure Indicator Bar .... ☞ pg. 20
- ⑥ Battery Pack Remaining Power Indicator
  Changes as follows according to the battery pack's remaining power level: "▰▰▰→▰▰→▰→▭". When the power is almost gone, the indicator blinks, then the unit shuts off. Replace the battery pack with a fully charged one .... ☞ pg. 4
- ⑦ Cassette Warning .... ☞ pg. 7
  Blinks when no cassette or a cassette with the Erase Protection tab removed is loaded.
- ⑧ Intelligent Function Control Indicator .... ☞ pg. 16
- ⑨ Remaining Tape Time .... ☞ pg. 10
- ⑩ Tape Length Indicator .... ☞ pg. 7
- ⑪ Recording Indicator .... ☞ pg. 10
- ⑫ Record–Standby Indicator .... ☞ pg. 10
- ⑬ Lens Cover Warning .... ☞ pg. 10
- ⑭ Index Code Marking .... ☞ pg. 12
- ⑮ Fade–Standby Indicator .... ☞ pg. 16
- ⑯ Clock Battery Warning
  Appears when the clock (lithium) battery is not in place or exhausted.
  For inserting or replacing the clock battery .... ☞ pg. 6
- ⑰ Insert Editing Indicator .... ☞ pg. 34
  Audio Dubbing Indicator .... ☞ pg. 35
- ⑱ Condensation Warning
  When this indicator appears, all functions are disabled. Turn the unit off for a few hours, and when you turn it on again the indicator should disappear.
- ⑲ Instant Title .... ☞ pg. 23
- ⑳ Date/Time/Character .... ☞ pg. 21
- ㉑ Interval
  Time/Recording Time Indicator .... ☞ pg. 24

DANGER:

- The video light becomes extremely hot. Do not touch it either while in operation or soon after turning it off, otherwise serious injury may result.
- Do not place the camcorder into the carrying case immediately after using the video light, since it remains extremely hot.
- When operating, keep a distance of about 30 cm between the video light and people or object.
- Do not use near flammable or explosive materials.
- Consult your nearest JVC dealer for replacing the video light unit.

General Battery Precautions

- When the RM-V20U (remote control), C-P6U or C-P7U (cassette adapter) are not functioning even when correctly operated, the batteries are exhausted. Replace them with fresh ones.
- Use only the following batteries:

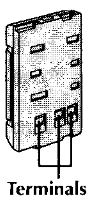
RM-V20U	R03 (AAA) size
C-P6U or C-P7U	R6 (AA) size

Please make note of the following rules for battery use. When misused, batteries can leak or explode.

1. Refer to the RM-V20U and C-P6U/C-P7U instructions when replacing batteries.
2. **Do not** use old and new batteries together.
3. **Do not** use two different kinds of batteries. Although sizes may be the same, voltages may differ.
4. **Do not** expose batteries to excessive heat as they can leak or explode.
5. **Do not** dispose of batteries in a fire.
6. Remove batteries from the unit if it is to be stored for an extended period to avoid battery leakage which can cause malfunctions.

Battery Packs

The supplied battery pack is a nickel-cadmium battery. Before using the supplied battery pack or an optional battery pack, be sure to read the following cautions:



1. To avoid hazard . . .

.... **do not** burn.
.... **do not** short-circuit the terminals.
.... **do not** modify or disassemble.
.... use only specified chargers.

2. To prevent damage and prolong service life . . .

.... **do not** subject to unnecessary shock.
.... avoid repeated charging without fully discharging.
.... charge in an environment where temperatures are within the tolerances shown in the chart below. This is a chemical reaction type battery—cooler temperatures impede chemical reaction, while warmer temperatures can prevent complete charging.
.... store in a cool, dry place. Extended exposure to high temperatures will increase natural discharge and shorten service life.
.... avoid prolonged uncharged storage.
.... remove from charger or powered unit when not in use, as some machines use current even when switched off.

3. To prevent damage to the camcorder . . .

.... replace the battery pack when it begins to deliver less recording time per charge.

NOTE:

It is normal for the battery pack to be warm after charging, or after use.

Temperature Ranges

Charging	10°C to 35°C
Operation	0°C to 40°C
Storage	–10°C to 30°C

NOTES:

- *Recharging time is based on room temperature of 20°C.*
- *The lower the temperature, the longer recharging takes.*

Cassettes

To properly use and store your cassettes, be sure to read the following cautions:

1. During use . . .

.... make sure the cassette bears the VHS-C mark.
.... be aware that recording onto prerecorded tapes automatically erases the previously recorded video and audio signals.
.... make sure the cassette is positioned properly when inserting.
.... do not load and unload the cassette repeatedly without allowing the tape to run at all. This slackens the tape and can result in damage.
.... do not open the front tape cover. This exposes the tape to fingerprints and dust.

2. Store cassettes . . .

.... away from heaters or other heat sources.
.... out of direct sunlight.
.... where they won't be subject to unnecessary shock or vibration.
.... where they won't be exposed to strong magnetic fields (such as those generated by motors, transformers or magnets).
.... vertically, in their original cases.

Main Unit

1. For safety, DO NOT . . .

..... open the camcorder's chassis.
..... disassemble or modify the unit.
..... short-circuit the terminals of the battery pack. Keep it away from metallic objects when not in use.
..... allow inflammables, water or metallic objects to enter the unit.
..... remove the battery pack or disconnect the power supply while the power is on.
..... leave the battery pack attached when the camcorder is not in use.

2. Avoid using the unit . . .

..... in places subject to excessive humidity or dust.
..... in places subject to soot or steam such as near a cooking stove.
..... in places subject to excessive shock or vibration.
..... near a television set.
..... near appliances generating strong magnetic or electric fields (speakers, broadcasting antennas, etc.).
..... in places subject to extremely high (over 40°C) or extremely low (under 0°C) temperatures.

3. DO NOT leave the unit . . .

..... in places of over 50°C.
..... in places where humidity is extremely low (below 35%) or extremely high (above 80%).
..... in direct sunlight.
..... in a closed car in summer.
..... near a heater.

4. To protect the unit, DO NOT . . .

..... allow it to become wet.
..... drop the unit or strike it against hard objects.
..... subject it to shock or excessive vibration during transportation.
..... keep the lens directed at extremely bright objects for long periods.
..... direct the eyepiece of the viewfinder at the sun.
..... carry it by holding the viewfinder.
..... swing it excessively when using the shoulder strap.

5. This camcorder features a built-in head cleaner which automatically cleans the heads and head drum when a cassette is loaded or unloaded. If, however, the heads become dirty and cause blurriness or interruption in the playback picture, consult your nearest JVC dealer.

About moisture condensation . . .

- You have observed that pouring a cold liquid into a glass will cause drops of water to form on the glass' outer surface. This same phenomenon occurs on the head drum of a camcorder when it is moved from a cool place to a warm place, after heating a cold room, under extremely humid conditions or in a place directly subjected to the cool air from an air conditioner.
- Moisture on the head drum can cause severe damage to the video tape, and can lead to internal damage to the camcorder itself.

Serious malfunctioning

If malfunctioning occurs, stop using the unit immediately and consult your local JVC dealer.

For Your Maintenance

1. After Use

① Set the power switch to POWER OFF to turn off the camcorder.
② Slide EJECT to open the cassette holder, then remove the cassette.
③ Close and lock the cassette holder by pressing PUSH.
④ Press BATT. RELEASE to remove the battery pack.
⑤ Slide the LENS COVER open/close switch to close the lens cover.

2. Cleaning The Camcorder

① **CLEAN EXTERIOR**
Wipe gently with a soft cloth.
② **CLEAN LENS**
Blow it with a blower brush, then wipe gently with lens cleaning paper.
③ **REMOVE EYEPIECE**
Turn the eyepiece counterclockwise and pull it out.
④ **CLEAN VIEWFINDER**
Remove dust using a blower brush.
⑤ **RE-ATTACH EYEPIECE**
Align the marks, re-attach the eyepiece and turn it clockwise.

NOTES:

- *Avoid using strong cleaning agents such as benzine or alcohol.*
- *Cleaning should be done only after the battery pack has been removed or other power units have been disconnected.*
- *Mold may form if the lens is left dirty.*

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)
POWER	
No power is supplied.	• The battery pack has not been attached correctly (☞ pg. 4). • The battery pack is not charged (☞ pg. 4). • The power supply has not been correctly connected (☞ pg. 5).
RECORDING	
Recording cannot be performed.	• The recording tape's Erase Protection tab is missing. Cover the hole with adhesive tape. (Some tapes have sliding tabs. In this case, check the position of the tab.)
Recording does not start.	• The camcorder power switch has not been set to CAMERA (☞ pg. 10).
PLAYBACK	
The tape is running, but there's no playback picture.	• The TV has not been set to its VIDEO mode. • If A/V connection is used, the TV's VIDEO/TV switch has not been set to VIDEO. • The RF unit has not been set to the correct channel.
Noise bars appear in the playback picture.	• Manual Tracking has not been performed (☞ pg. 29).
Playback picture is blurred or interrupted.	• The video heads are dirty or worn out. Consult your nearest JVC dealer for head cleaning or replacement.
The counter indication is blurred during Still playback.	• This is normal.
TAPE TRANSPORT	
The tape stops during fast-forward or rewind.	• The Counter Memory Function has been activated (☞ pg. 29).
Rewinding or fast-forwarding cannot be performed.	• The tape is already fully wound on one reel or the other.
OTHER	
The tape won't eject.	• The battery pack is running low.
Some functions are not available.	• The PROGRAM AE dial is set to LOCK (☞ pg. 14).
Vertical white lines appear when shooting a very bright object.	• This sometimes occurs when the contrast between the background and the object is great. It is not a defect of the camcorder.
Bright, crystal-shaped spots appear in the viewfinder.	• Sunlight is directly entering the lens.
An error number (E01, etc.) appears in the viewfinder.	• Consult your nearest JVC dealer.

The camcorder is a microcomputer-controlled device. External noise and interference (from a TV, a radio, etc.) might prevent it from functioning properly. In such cases, first disconnect its power supply unit (battery pack, AC Power Adapter/Battery Charger, etc.) and clock battery; and then re-connect it and proceed as usual from the beginning.

SPECIFICATIONS

GENERAL

Format : VHS PAL standard
Power source : DC 6 V ⎓
Power consumption
  GR-AX460 light on : 8.7 W
  GR-AX460 light off : 5.7 W
  GR-AX360 : 5.9 W
  GR-AX260 : 5.7 W
Signal system : PAL-type
Video recording system
  Luminance : FM recording
  Colour : Converted sub-carrier direct recording Conforms to VHS standard
Cassette : VHS C cassette
Tape speed : 23.39 mm/sec
Recording time
  Max. : 45 minutes (with EC-45 cassette)
Operating temperature : 0°C to +40°C
Operating humidity : 35% to 80%
Storage temperature : –20°C to +50°C
Weight
  GR-AX460 : Approx. 770 g
  GR-AX360 : Approx. 750 g
  GR-AX260 : Approx. 760 g
Dimensions
  GR-AX460/AX260 : 109 (W) x 113 (H) x 226 (D) mm
  GR-AX360 : 109 (W) x 113 (H) x 206 (D) mm

CAMERA

Pick up : 1/4" format CCD
Minimum required illumination : 2 lx (F1.2)
Illumination range : 2 to 100,000 lx
Lens : F1.2, f = 4.1 to 57.4 mm, 14:1 power zoom lens with auto iris and macro control, filter diameter 46 mm
Viewfinder : Electronic viewfinder with
  • 0.55" colour LCD (GR-AX360)
  • 0.5" black/white CRT (GR-AX460/AX260)
White balance adjustment : Auto/Manual adjustment

VIDEO

Output : 1 Vp-p, 75 ohms, unbalanced (via VIDEO out connector)

AUDIO

Output : –8 dBs, 1 k-ohm (via AUDIO out connector)

AAC POWER ADAPTER/BATTERY CHARGER (AA-V11EG) SPECIFICATIONS

Power requirement : AC 110 to 240 V∿, 50/60 Hz
Power consumption : 23 W
Output : DC 8.5 V ⎓, 1.3 A (CHARGE), DC 6.3 V ⎓, 1.8 A (VTR)
Charging system : Constant current, peak detection, timer controlled
Dimensions : 150 (W) x 42 (H) x 68 (D) mm
Weight : Approx. 350 g

CASSETTE ADAPTER (C-P7U) SPECIFICATIONS

Dimensions : 188 (W) x 25 (H) x 104 (D) mm
Weight : Approx. 240 g
Accessory : "R6 (AA)"-size battery x 1

Provided Accessories .... ☞ pg. 3

Optional Accessories

- **Battery Packs BN-V12U, BN-V22U, BN-V25U**
- **Car Battery Charger BH-V3E**
- **Battery Charger BH-VC10EG**
- **Car Battery Cord AP-V7E**
- **RF Unit RF-V5E**
- **Wireless Remote Control Unit RM-V704U**
- **Wired Remote Control Unit RM-V20U**
- **Compact VHS-C Cassettes EC-45/30**
- **Active Carrying Bag CB-V7U**

* Some acccessories are not available in some areas. Please consult your nearest JVC dealer for details on accessories and their availability.

E.&O.E.Design and specifications subject to change without notice.

SECTION 1
DISASSEMBLY

1.1 SERVICE CAUTIONS

1.1.1 Precautions

1. Before disassembling/re-assembling the set as well as soldering parts, make sure to disconnect the power cable.
2. When disconnecting/connecting connectors, pay enough attention to wiring not to damage it.
3. In general, chip parts such as resistor, shorting jumpers (0-ohm resistor), ceramic capacitors, diodes, etc. can not be reused after they were once removed.
4. When installing parts, be careful not to do with other parts as well as not to damage others.
5. When removing ICs, be careful not to damage circuit patterns.

1.1.2 How to read the disassembly and assembly

(For Cabinet Parts)

STEP /LOC NO.	PART	Fig. No.	REMOVAL	
			*UNLOCK/RELEASE/ UNPLUG/UNCLAMP/ UNSOLDER	Note
①	CASSETTE COVER ASSY	C1	(S1), (L1), 2(L2) *CONNECTORⒶ	<NOTE 1> <NOTE 2>
②	TOP COVER	C2	(S2), 2(L3)	–
③	REAR CASE ASSY	C3	6(S2), (L4), 2(L5) *JACK COVER *CAP (LITIUM)	<NOTE 3>
④	LOWER CASE ASSY	C4	(S1), 4(S2), 4(L6), (S9) *CONNECTORⒷ	<NOTE 2> <NOTE 4>

↑ ↑ ↑ ↑ ↑
① ② ③ ④ ⑤

① : Order of steps in Procedure
When reassembling, preform the step(s) in the reverse order. These numbers are also used as the identification (location) No. of parts Figures.

② : Part to be removed or installed.

③ : Fig. No. showing Procedure or Part Location.

C = Cabinet
CA = Camera
D = Deck

④ : Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped or unsoldered.

P = Spring
W = Washer
S = Screw
* = Unhook, unlock, release, unplug or unsolder.
6(S2) = 6 Screws (S2)

⑤ : Adjustment information for installation.

1.1.3 Connection of the wires

1. Pull the connector structure upward to release the clamp when removing or inserting the flat wire cable.

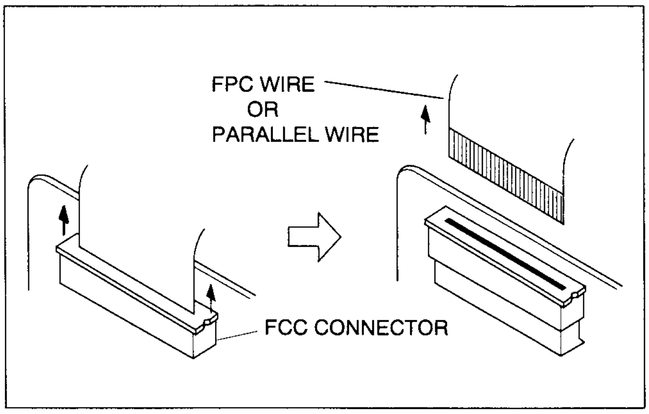


Fig. 1 TYPE A

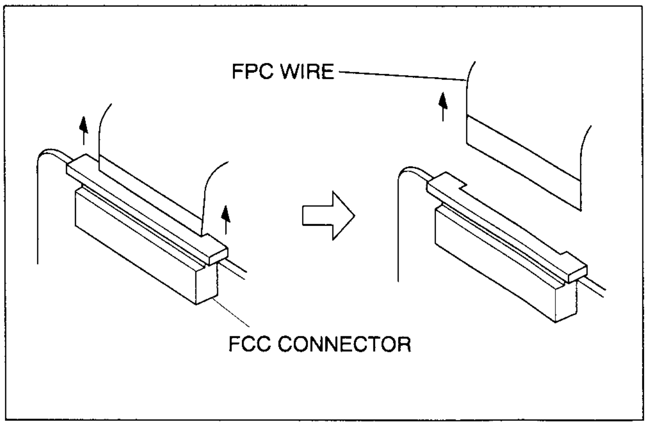


Fig. 2 TYPE B

2. Depress the connector structure downward to release the clamp when removing or inserting the flat wire cable, as indicated below.

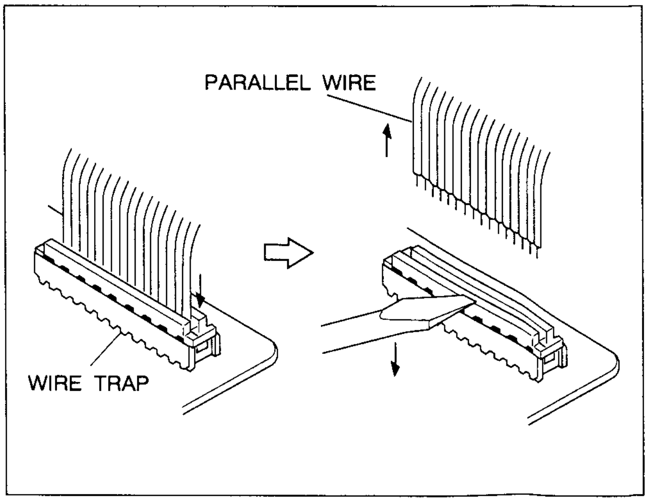


Fig. 3 TYPE C

1.1.4 Main screws to deal with disassembly/assembly

Table 1-1-1 lists screws by their symbols correspond to those shown in figures of this section "Disassembly".

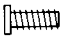
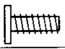
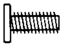
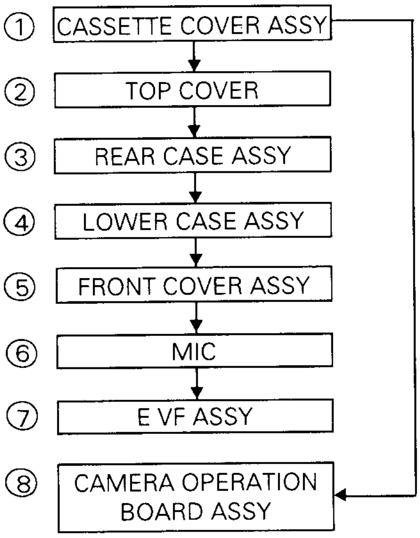
SYMBOL OF SCREW	SHAPE	PART NUMBER
S1		YQM30032-59
S2		YQM30032-4-2
S3		YQ43762-3
S4		YQ43545
S5		YQ44457-3
S6		YQM30032-2-2
S7		SPSP2006Z
S8		YQ44457-2
S9		YQM30032-8

Table 1-1-1

1.2 DISASSEMBLY/ASSEMBLY OF CABINET PARTS

1.2.1 Disassembly flow chart

This flowchart indicates the disassembly step for the cabinet parts and P.C. boards in order to gain access to item(s) to be serviced. When reassembling, perform the step(s) in reverse order. Bend, route and dress the flat cables as they were originally.


① CASSETTE COVER ASSY
② TOP COVER
③ REAR CASE ASSY
④ LOWER CASE ASSY
⑤ FRONT COVER ASSY
⑥ MIC
⑦ E VF ASSY
⑧ CAMERA OPERATION BOARD ASSY

1.2.2 Disassembly method

STEP /LOC NO.	PART	Fig. No.	REMOVAL	
			*UNLOCK/RELEASE/ UNPLUG/UNCLAMP/ UNSOLDER	Note
①	CASSETTE COVER ASSY	C1	(S1), (L1), 2(L2) *CONNECTORⒶ	<NOTE 1> <NOTE 2>
②	TOP COVER	C2	2(S2), 2(L3)	-
③	REAR CASE ASSY	C3	6(S2), (L4), 2(L5) *CAP (LITIUM) *JACK COVER	<NOTE 3>
④	LOWER CASE ASSY	C4	(S1), 4(S2), 6(L6), (S9) *CONNECTORⒷ	<NOTE 2> <NOTE 4>
⑤	FRONT COVER ASSY	C5	2(S2), 2(L7) *LENS, LAMP REFLECTOR	-
⑥	MIC	C6	(L8), (L9) *CONNECTORⒸ	<NOTE 2>
⑦	EVF ASSY	C7	2(S3), 2(L10) *BRACKET	-
⑧	CAMERA OPERATION BOARD ASSY	C8	4(S6)	-

List of Abbreviations:
(S1) = 1 Screw (S1)
6(S2) = 6 Screws (S2)
2(L5) = 2 Locking Tabs (L5)

NOTE: *First disconnect connector Ⓐ, then remove the cassette cover assy.*

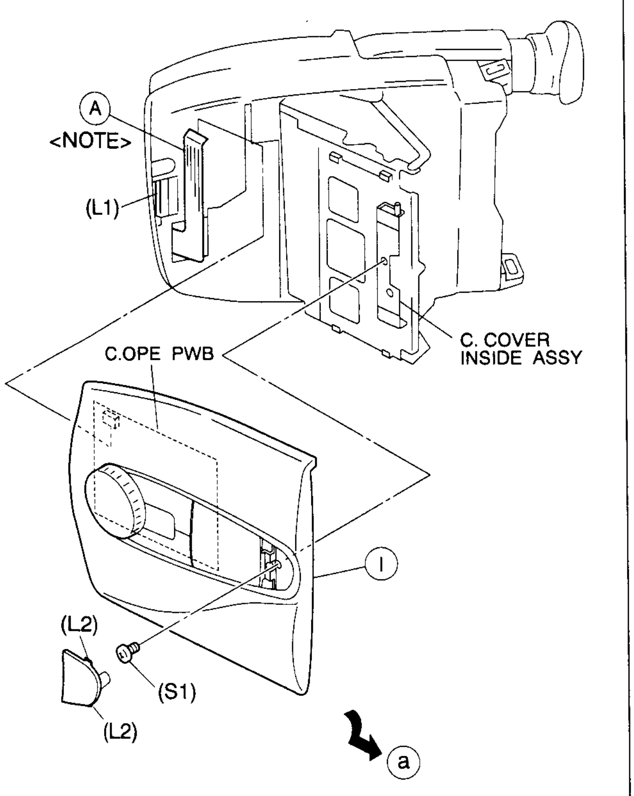

Ⓐ
<NOTE>
(L1)
C.OPE PWB
C. COVER
INSIDE ASSY
①
(L2)
(S1)
(L2)
ⓐ

Fig. C1

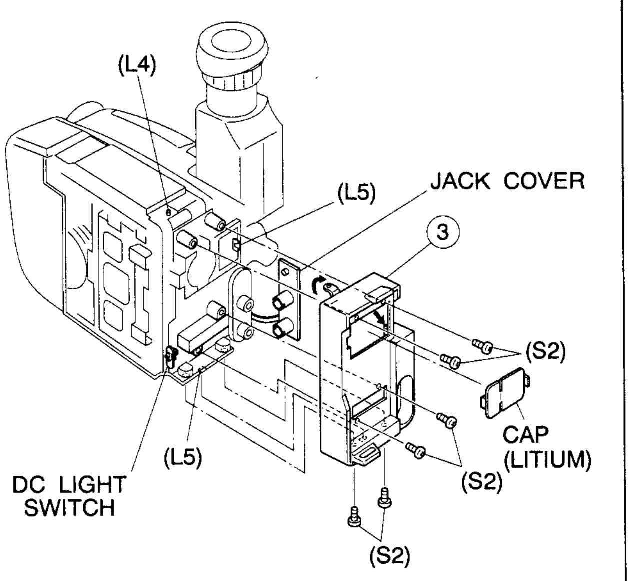

(L4)
(L5)
JACK COVER
③
(S2)
CAP
(LITIUM)
(S2)
(L5)
DC LIGHT
SWITCH
(S2)

Fig. C3

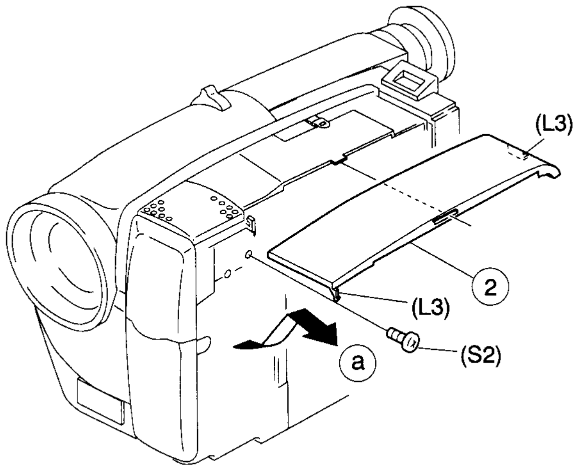


Fig. C2

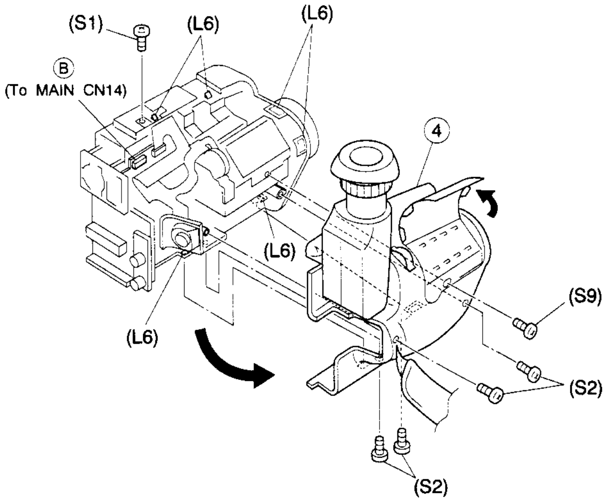
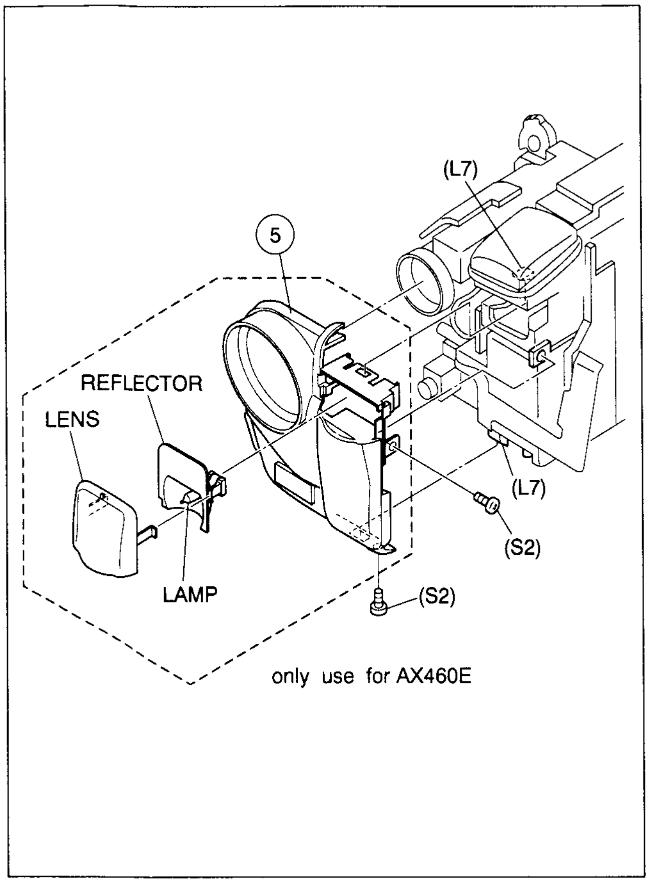
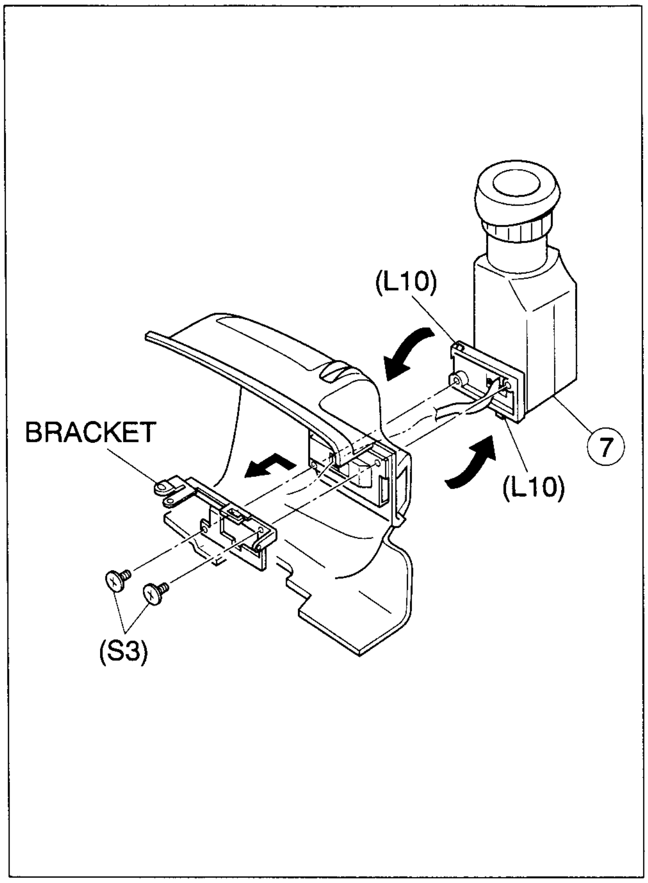

(S1)
(L6)
(L6)
Ⓑ
(To MAIN CN14)
④
(L6)
(L6)
(S9)
(S2)
(S2)

Fig. C4



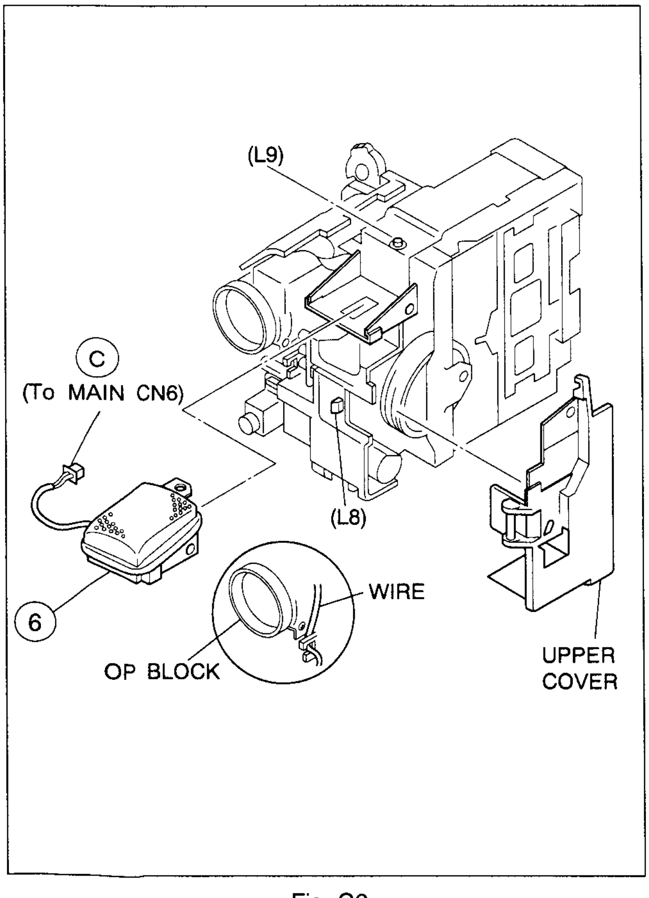
(L7)
5
REFLECTOR
LENS
(L7)
(S2)
LAMP
(S2)
only use for AX460E

Fig. C5



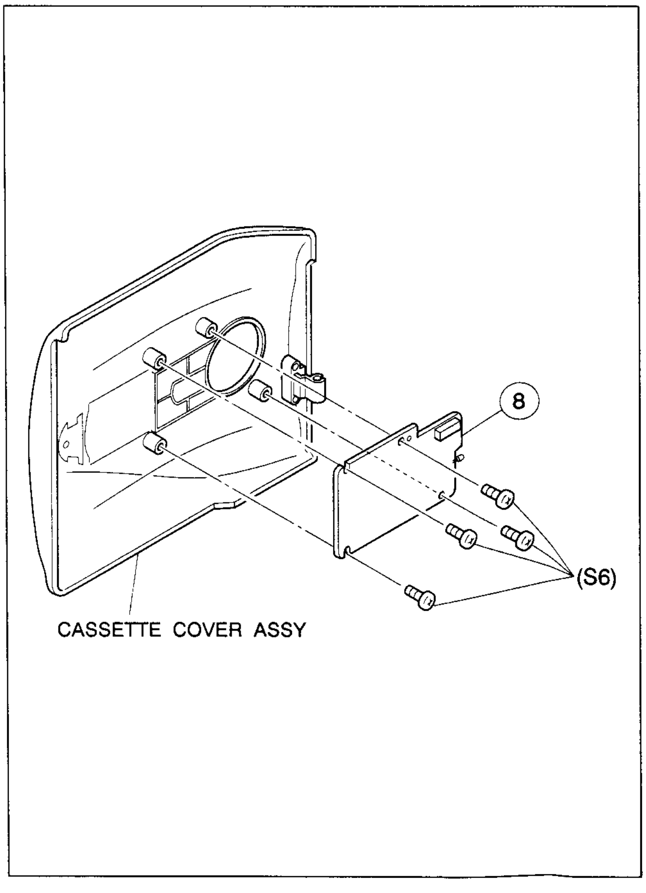
(L10)
BRACKET
7
(L10)
(S3)

Fig. C7



(L9)
C
(To MAIN CN6)
(L8)
WIRE
6
OP BLOCK
UPPER COVER

Fig. C6



8
(S6)
CASSETTE COVER ASSY

Fig. C8

Reference Notes:

<NOTE 1>

1. Use the AC Power Adaptor (DC6V TYPE) and supply the DC power to the unit.
   Open the cassette cover by pressing the EJECT switch.
2. Disconnect the DC power source.
3. First disconnect connector Ⓐ, then remove the push button assy and screw (S1).
   Remove ① from C. Cover inside assy in direction of arrow ⓐ.

<NOTE 2>

Destination of connectors

Note: *Three kinds of double-arrows in connection tables respectively show kinds of connector/wires.*

⬌ : Board to Board connector
⇔ : Flat wire
↔ : Wire

Con-nector	No. of Pins	Connector		
Ⓐ	11	OPERATION (CAMERA)	⇔	MAIN CN7
Ⓑ	10	E VF	⇔	MAIN CN14
Ⓒ	2	MIC	↔	MAIN CN6

<NOTE 3>

First remove the JACK COVER, then remove ③ .

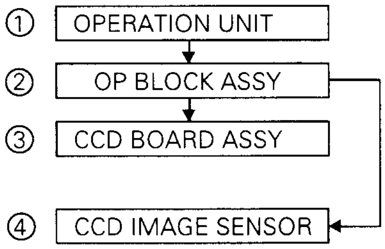
<NOTE 4>

First remove the grip strap, then remove ④.

1.3 DISASSEMBLY/ASSEMBLY OF CAMERA PARTS

1.3.1 Disassembly flow chart

This flowchart indicates the disassembly step for the CAMERA parts and P.C. boards in order to gain access to item(s) to be serviced. When reassembling, perform the step(s) in reverse order. Bend, route and dress the flat cables as they were originally.



*Refer to section 1.6

1.3.2 Disassembly method

STEP /LOC NO.	PART	Fig. No.	REMOVAL	
			*UNLOCK/RELEASE/ UNPLUG/UNCLAMP/ UNSOLDER	Note
①	OPERATION UNIT	CA1	2(S2), 3(L1) *CONNECTOR Ⓐ	<NOTE 1>
②	OP BLOCK ASSY	CA1	2(S2) *CONNECTOR Ⓓ	<NOTE 1>
③	CCD BOARD ASSY	CA1	2(S7), *SHILD PLATE *CONNECTORS Ⓑ,Ⓒ,Ⓔ	<NOTE 1> <NOTE 2>

List of Abbreviations:
2(S2) = 2 Screws (S2)
(L1) = 1 Locking (L1)

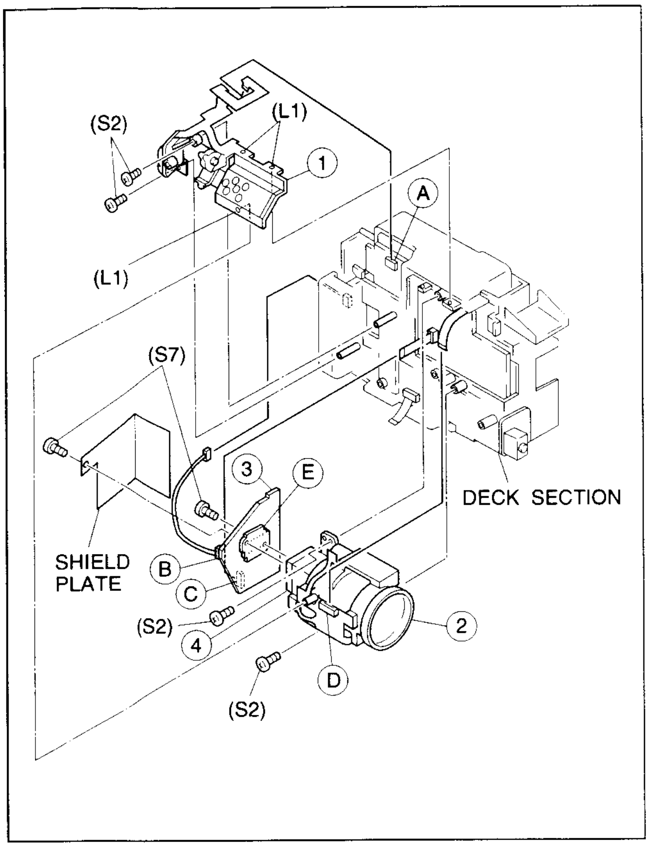


Fig. CA1

Reference Notes:
<NOTE 1>
Destination of connectors

Note: *Three kinds of double-arrows in connection tables respectively show kinds of connector/wires.*

⬌: Board to Board connector
⇔: Flat wire
↔: Wire

Con-nector	No. of Pins	Connector
Ⓐ	13	OPERATION UNIT ⇔ MAIN CN13
Ⓑ	4	CCD CN203 ↔ REAR CN3
Ⓒ	28	CCD CN202 ⇔ MAIN CN12
Ⓓ	22	OP BLOCK ⇔ MAIN CN11
Ⓔ	14	CCD CN201 ⬌ CCD SOCKET

<NOTE 2>

1. Remove two screws (S7).
2. Disconnect connectors Ⓑ and Ⓒ.
3. Move the CCD board in the direction of the rear side. At that time, pay careful attention to pins (connector Ⓔ) of the CCD image sensor so as not to damage them.

1.4 DISASSEMBLY/ASSEMBLY OF DECK PARTS

1.4.1 Disassembly flow chart

This flowchart indicates the disassembly step for the DECK parts and P.C. boards in order to gain access to item(s) to be serviced. When reassembling, perform the step(s) in reverse order. Bend, route and dress the flat cables as they were originally.

① REAR BOARD ASSY
↓
② IR BOARD ASSY
↓
③ MAIN BOARD ASSY & MECHANISM ASSY
↓
④ SENSOR BOARD ASSY
↓
⑤ CASSETTE HOUSING

1.4.2 Disassembly method

STEP /LOC NO.	PART	Fig. No.	REMOVAL	
			*UNLOCK/RELEASE/ UNPLUG/UNCLAMP/ UNSOLDER	Note
①	REAR BOARD ASSY	D1	3(L1) *CONNECTOR Ⓐ, Ⓙ	<NOTE 1>
②	IR BOARD ASSY	D1	(L2) *CONNECTOR Ⓑ	<NOTE 1>
③	MAIN BOARD ASSY	D1	3(S4), (S5), (L3) *FRAME ASSY *CONNECTORS Ⓒ-Ⓗ	<NOTE 1>
④	SENSOR BOARD ASSY	D2	2(S5), 4(S8) *BRACKET	<NOTE 1>
⑤	CASSETTE HOUSING	D3	2(S4), 4(S5)	

List of Abbreviations:
3(S4) = 3 Screws (S4)
(L3) = 1 Locking Tab (L3)

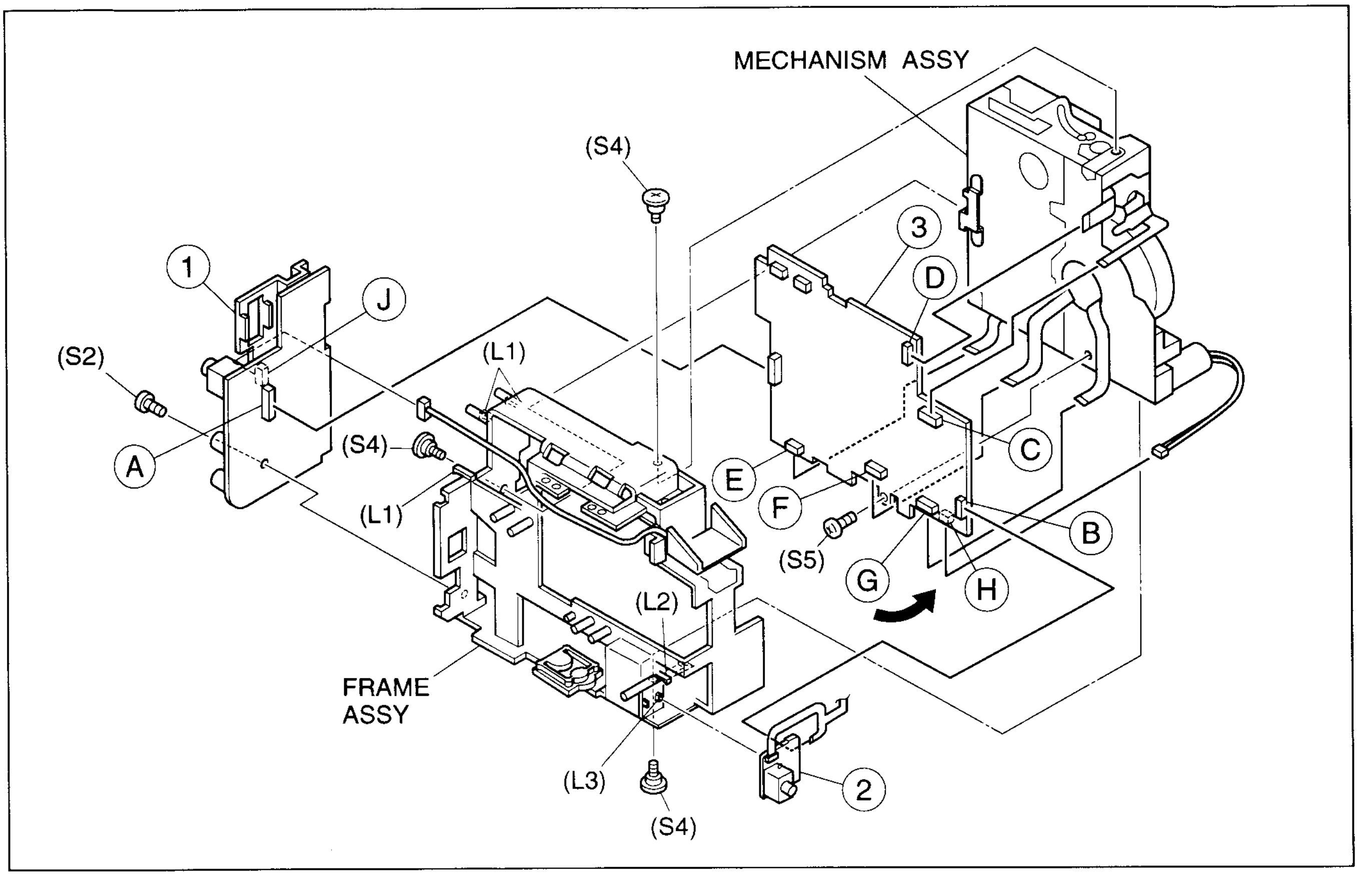

MECHANISM ASSY
(S4)
3
1
J
D
(S2)
(L1)
(S4)
A
(L1)
E
C
F
(S5)
B
G
H
(L2)
FRAME ASSY
(L3)
2
(S4)

Fig. D1

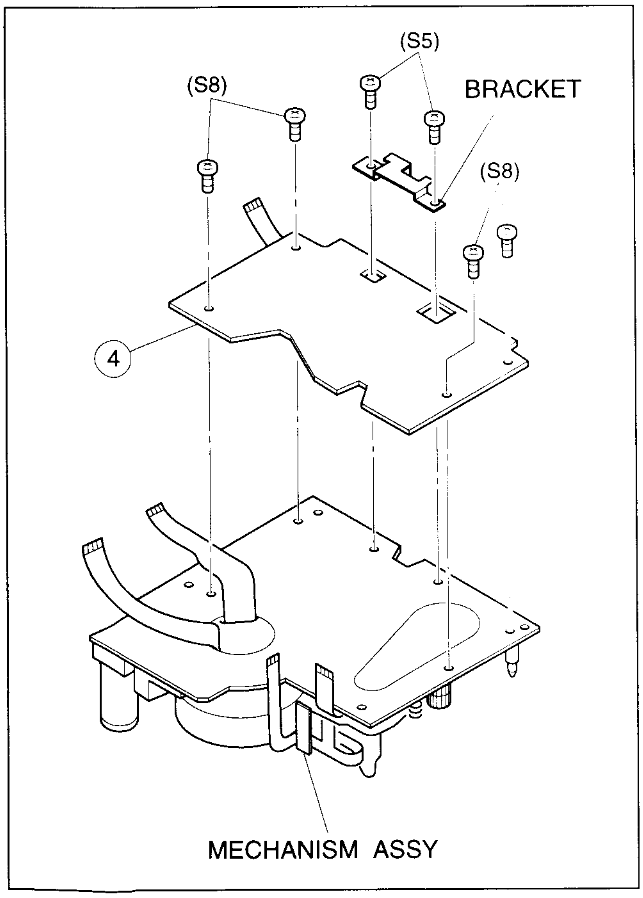

(S5)
(S8)
BRACKET
(S8)
4
MECHANISM ASSY

Fig. D2

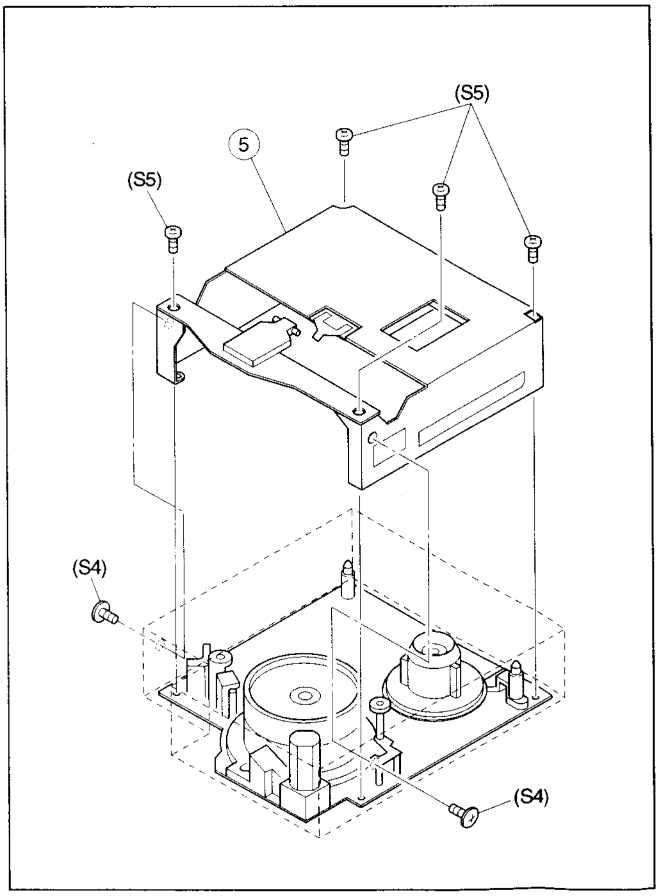


Fig. D3

Reference Notes:
<NOTE 1>
Destination of connectors

Note: *Three kinds of double-arrows in connection tables respectively show kinds of connector/wires.*

⬌ : Board to Board connector
⇔ : Flat wire
↔ : Wire

Con-nector	No. of Pins	Connector
Ⓐ	48	MAIN CN15 ⬌ REAR CN1
Ⓑ	8	MAIN CN7 ⇔ IR
Ⓒ	11	MAIN CN8 ⇔ A/C HEAD
Ⓓ	18	MAIN CN10 ⇔ CAPSTAN MOTOR
Ⓔ	14	MAIN CN1 ⇔ SENSOR
Ⓕ	11	MAIN CN2 ⇔ VIDEO HEAD
Ⓖ	18	MAIN CN3 ⇔ DRUM MOTOR
Ⓗ	2	MAIN CN4 ↔ LOADING MOTOR
Ⓙ	2	REAR CN4 ↔ DC LIGHT

1.5 TO TAKE OUT CASSETTE TAPE

In the event that the set enters the emergency mode as it is loaded with a cassette tape and the cassette tape cannot be ejected with the EJECT button, manually, take it out of the set according to the following procedure.

Note:

- *First disconnect connector Ⓐ, remove the cassette cover assy.*
- *If the mechanism comes into the unloading mode as the cassette tape is not held by hand, it results in tape damage.*

1. Disconnect the set from the power source.
2. To detach the push button, release it from locking by two pawls by using (−) screw driver as shown in the magnified view Ⓑ and move it. (Fig. 1-5-1)
3. Remove one screw, open the cassette cover assy and disconnect connector Ⓐ.
4. Remove cassette cover assy.
5. Connect a jumper wire to each pole of the loading motor as shown by the magnified view Ⓒ (Fig. 1-5-2)
6. While holding down the cassette housing by hand, connect the jumper wires to a battery to run the mechanism to the EJECT position four unloading. If this unloading operation is performed as the cassette housing is not held down by hand, the front lid of the cassette may damage the tape when it is ejected.
7. For taking in the slack of the tape, run the mechanism to the EJECT position as the front lid of the cassette is left open, and turn the take-up reel in the forward direction to wind up the tape. After confirming that the tape has completely been wound up and the supply reel is idling, take the cassette tape out of the cassette housing.

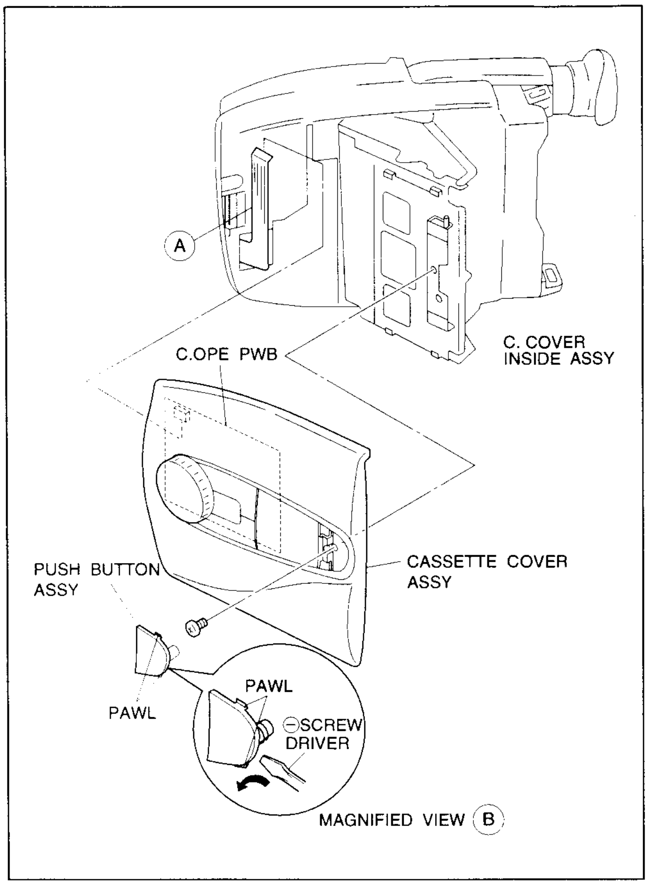


Fig. 1-5-1

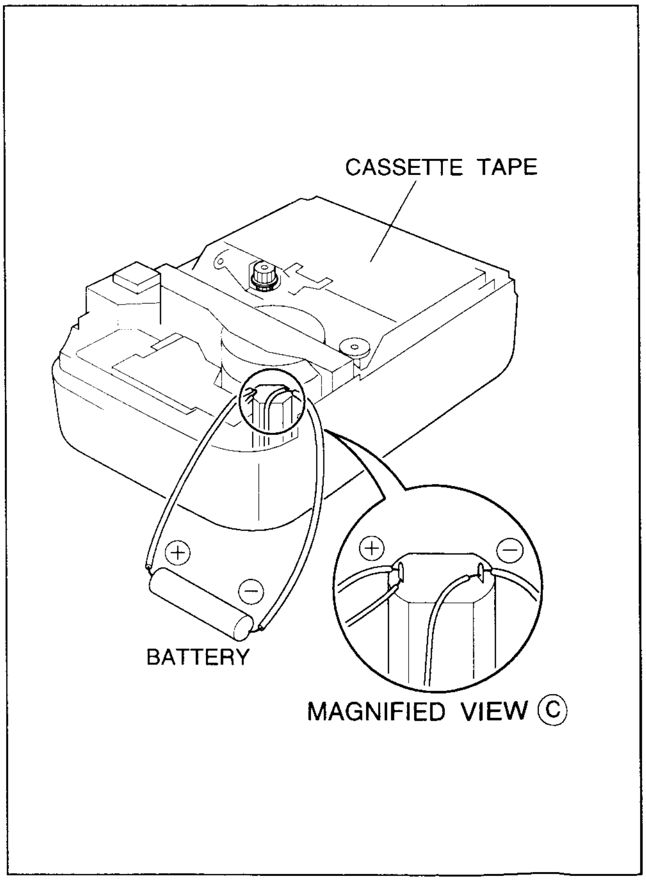


Fig. 1-5-2 CASSETTE TAPE

1.6 REPLACEMENT OF CCD IMAGE SENSOR

Notes:

- *Pay the most careful attention to the transparent glass and optical LPF of the CCD image sensor so a not the soil and damage them. If something is soiled with finger-prints, etc., gently clean it with silicon-processed paper/cloth or chamois.*
- *When the CCD image sensor is shipped from the factory, there are protection seals applied onto the transparent glass. Leave the protector as it is, and take it off just before assembling the CCD image sensor to the OP block.*

1.6.1 Removal of CCD image sensor

1. Remove two screws Ⓐ securing the CCD base, and disassemble the CCD spacer, the optical LPF, spacer rubber.

1.6.2 Installation of new CCD image sensor

1. Remove the protection seal from a new CCD image sensor. Next, put the spacer rubber, optical LPF, CCD spacer on the CCD image sensor as they are piled up in this order. At that time, make sure of orientation of each item refering to the following table (see Fig. 1-6-1).

Part Name	Orientation
CCD image sensor	Mark is on the right viewed as indicated by the arrow ⓐ.
Spacer rubber	IC side is horizontal.
Optical LPF	Marks are on the left and bottom viewed as indicated by the arrow ⓐ.

2. Fix the CCD base to OP block with the two screws Ⓐ. At that time, be careful of the orientation.
3. After completion of all P.C. boards to the camera section, observe the monitor to confirm no vignetting caused by the bodytube, rings, lens hood, etc. If no vignetting is observed, it can be said that image's parallel, horizontality and centering are correct.

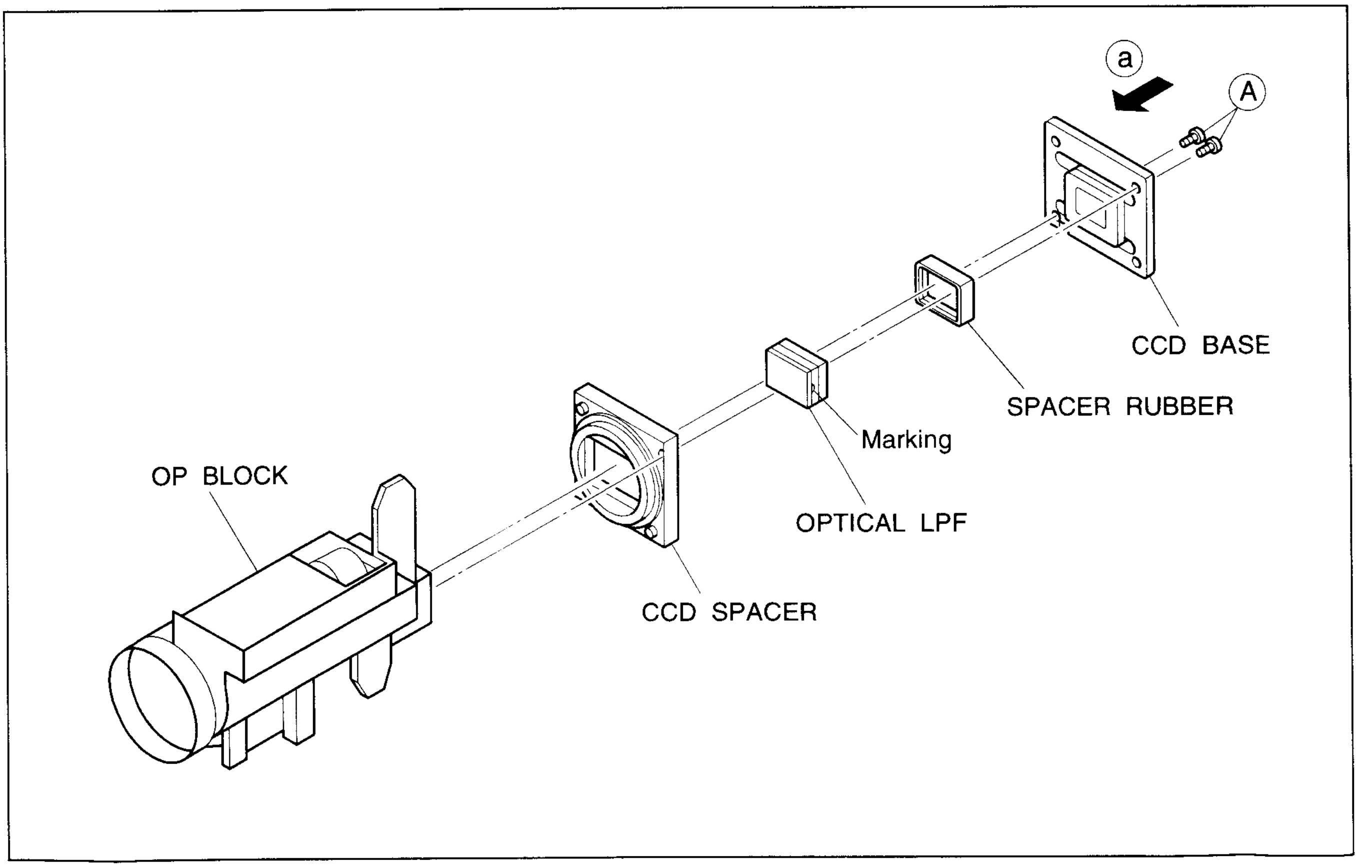


Fig. 1-6-1 CCD image sensor

1.7 EXTENSION CABLE CONNECTION

Connector	Pins	Connection			Part Number	Description
①	11	MAIN CN8	↔	A/C HEAD	YTU94077-11 YTU94074-11	–
②	18	MAIN CN10	↔	CAPSTAN MOTOR	YTU94077-18 YTU94074-18	–
③	10	MAIN CN14	↔	E. VF	YTU94077-10 YTU94074-10	–
④	13	MAIN CN13	↔	OPERATION UNIT	YTU94077-13 YTU94074-13	–
⑤	48	MAIN CN15	↔	REAR CN1	PEMCJ0987-048	–
⑥	22	MAIN CN11	↔	OP BLOCK	YTU94077-22 YTU94074-22	–
⑦	28	MAIN CN12	↔	CCD CN202	YTU94077-28	–
⑧	4	CCD CN203	↔	REAR CN3	YUJ40095A-4	–
⑨	11	MAIN CN7	↔	C. COVER	YTU94032A-11 YUJ41355B-11	–
⑩	8	MAIN CN7	↔	IR	YTU94077-8 YTU94074-8	–
⑪	2	MAIN CN6	↔	MIC	YUJ40095A-2	–

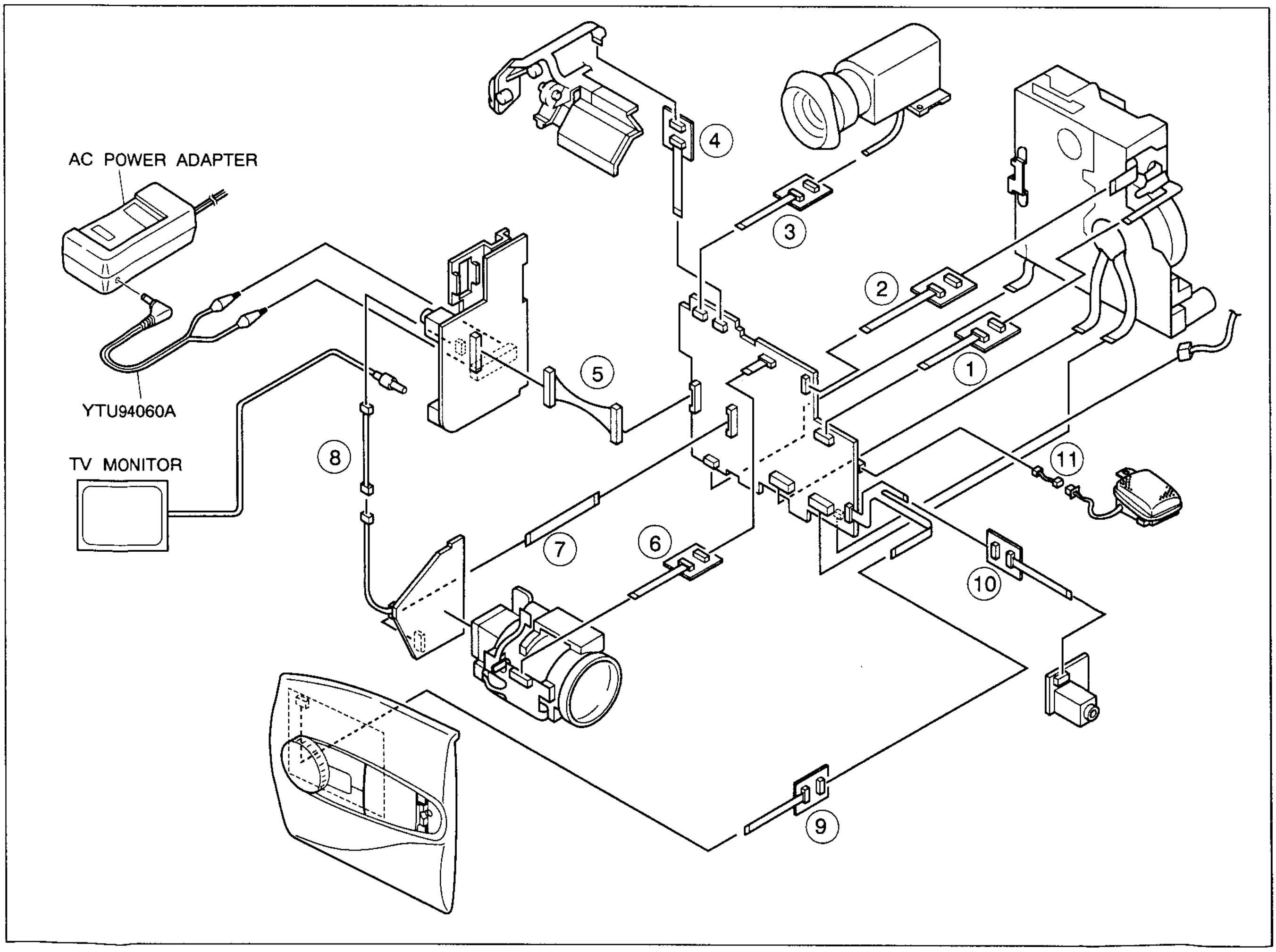


Fig. 1-7-1 EXTENSION CABLE CONNECTION

SECTION 2
MECHANISM ADJUSTMENT

2.1 SERVICE CAUTIONS

2.1.1 Precautions

1. Before disassembling/re-assembling the set as well as soldering parts, make sure to disconnect the power cable.
2. When disconnecting/connecting connectors, pay enough attention to wiring not to damage it.
3. When installing parts, be careful not to do with other parts as well as not to damage others. (Pay the most careful attention to the upper drum assy and tape transport mechanism.)

2.1.2 How to read the disassembly and assembly (For Mechanism Parts)

① : Order of steps in Procedure
When reassembling, perform the step(s) in the reverse order. These numbers are also used as the identification (location) No. of parts Figures.

② : Part to be removed or installed.

③ : Location of part.

T = Top
B = Bottom

④ : Fig. No. showing Procedure or Part Location.

M = Mechanism

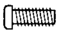
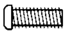
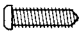
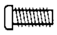
⑤ : Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped or unsoldered.

P = Spring
W = Washer
S = Screw
* = Unhook, unlock, release, unplug or unsolder.

⑥ : Adjustment information for installation.
(+) = Refer to Exploded Views for Lubrication information.

2.1.3 Main screws and washers to deal with disassembly/assembly

Table 2-1-1 lists screws and washers by their symbols which correspond to those shown in figures of this section "Disassemby and Assembly".

SYMBOL OF SCREW	SHAPE	PART NUMBER
S1		YQ44457
S2		YQ44457-3
S3		YQ44457-2
S4		SPSN1750Z
S5		YQ44304
S6		YQ44460
S7		YQ44458
S8		YQ44457-4
S9		YQ44457-5

SYMBOL OF WASHER	SHAPE	PART NUMBER
W1		PQM30017-27
W2		Q03093-835
W3		PQM30017-25

Table 2-1-1

(For Mechanism Parts)

STEP/LOC. No.	PART		Fig. No.	REMOVAL	INSTALLATION
				*UNHOOK/UNLOCK /RELEASE/UNPLUG /UNSOLDER	ADJUSTMENT CONDITION NOTE
①	ROLLER BASE ASSY	T	M1	(S1)	–
②	TENSION ARM ASSY	T	M1	(P1), (W1)	–
③	REEL DISK (SUP)	T	M1	(W1), (W2)	–
④	SLANT ARM ASSY	T	M1	(W1)	–
⑤	CANCEL LEVER ASSY	T	M2	(W1)	–
⑥	EJECT LEVER ASSY	T	M2	(W1)	–
⑦	CASSETTE GUIDE (L) ASSY	T	M2	(S1)	–

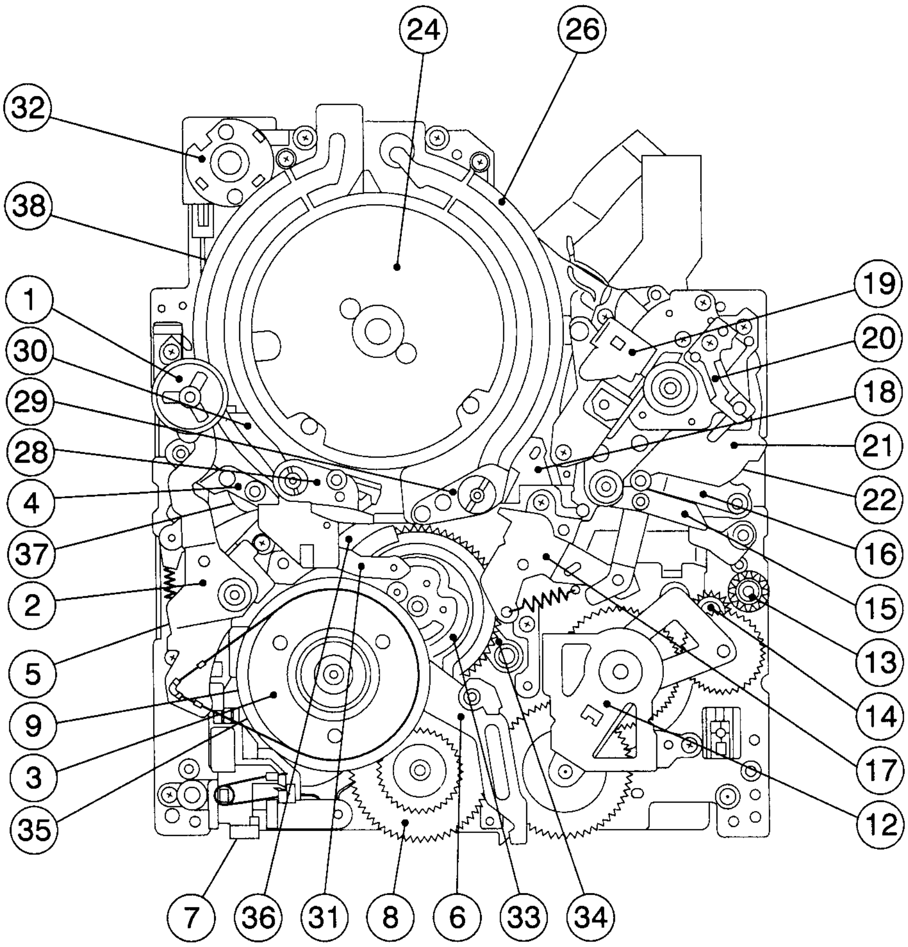
↑① ↑② ↑③ ↑④ ↑⑤ ↑⑥

2.2 DISASSEMBLY/ASSEMBLY OF MECHANISM PARTS

This procedure starts with the condition that the cabinet parts and deck parts. Also, all the following procedures for adjustment and parts replacement should be performed in STOP mode. When reassembling, perform the step(s) in the reverse order.

STEP/LOC. No.	PART		Fig. No.	REMOVAL	INSTALLATION
				*UNHOOK/UNLOCK /RELEASE/UNPLUG /UNSOLDER	ADJUSTMENT CONDITION NOTE
①	ROLLER BASE ASSY	T	M1	(S1)	-
②	TENSION ARM ASSY	T	M1	(P1), (W1)	-
③	REEL DISK (SUP)	T	M1	(W1), (W2)	-
④	SLANT ARM ASSY	T	M1	(W1)	-
⑤	CANCEL LEVER ASSY	T	M2	(W1)	-
⑥	EJECT LEVER ASSY	T	M2	(W1)	-
⑦	CASSETTE GUIDE (L) ASSY	T	M2	(S1)	-
⑧	SUPPLY CLUTCH ASSY	T	M2	(W1)	-
⑨	WHEEL GEAR	T	M2	(W1)	See, Adjustment procedure for Section 2.4
(10A)	BRACKET	B	M3	2(S2)	-
(10B)	SENS BOARD ASSY (R. ENCODER)	B	M3	4(S3)	-
⑪	TIMING BELT	B	M3	-	-
⑫	CENTER PULLEY UNIT	T/B	M3	2(S3)	-
⑬	TU GEAR	T	M3	(W1)	-
⑭	BRAKE SUB GEAR	T	M3	(W1)	-
⑮	P.R ARM ASSY	T	M3	(W3)	-
⑯	TU GUIDE ARM ASSY	T	M3	(W1)	-
⑰	LINK ARM ASSY	T	M4	(W3)	-
⑱	LED GUIDE	T	M4	(S1)	-
⑲	A/C HEAD UNIT	T	M4	2(S4)	-
⑳	SLANT POLE BASE ASSY	T	M5	(S5)	-
㉑	CAP MOTOR ASSY	T	M5	3(S5)	-
(22A)	MOTOR BASE	T	M5	2(S1), (S6)	-
(22B)	CLEANER ASSY	T/B	M5	2(S7), (L1)	
㉓	BRUSH	B	M6	(S3)	-
㉔	DRUM FINAL	T/B	M6	2(S1), 2(S8), *CATCHER	-
㉖	GUIDE RAIL	T	M6	8(S9)	-
㉘	POLE BASE (SUP)	T	M6	-	-
㉙	POLE BASE (TU)	T	M6	-	-
㉚	COVER PLATE	T	M7	-	-
㉛	DRIVE LEVER ASSY	T	M7	-	-
㉜	MOTOR BRACKET ASSY	T	M7	3(S1)	-
㉝	CONTROL CAM	T	M8	(W3)	See, Adjustment procedure for Section 2.4
㉞	LINK LEVER	T	M8	-	-
㉟	MIDDLE GEAR	T	M8	-	-
㊱	LOADING GEAR(T) ASSY	T	M8	(W1)	See, Adjustment procedure for Section 2.4
㊲	LOADING GEAR(S) ASSY	T	M8	(W1)	-
㊳	LOADING RING ASSY	T	M8	4(S1)	See, Adjustment procedure for Section 2.4

TOP VIEW



24
26
32
38
1
30
29
28
4
37
2
5
9
3
35
7
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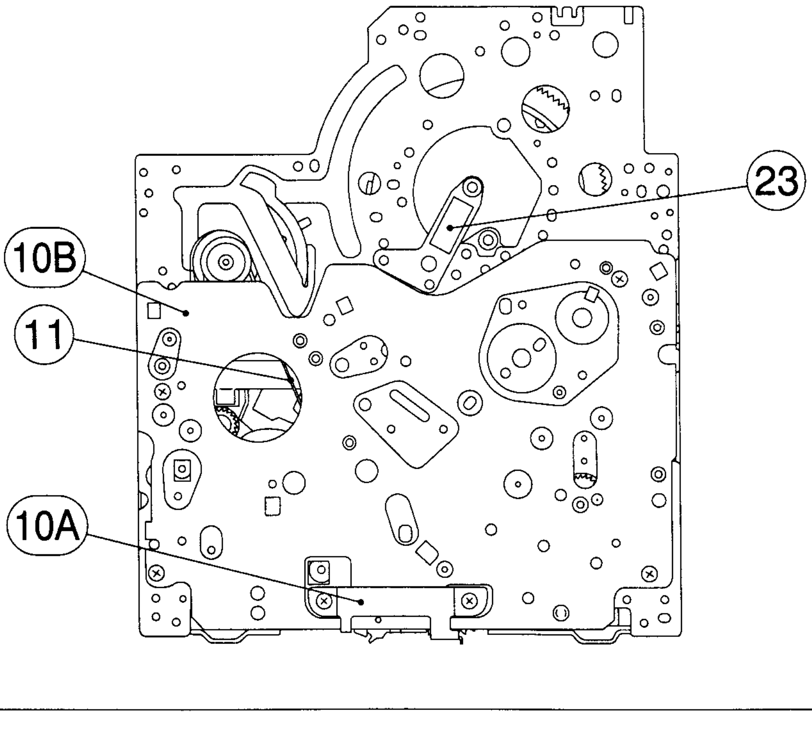
31
8
6
33
34
19
20
18
21
22
16
15
13
14
17
12

BOTTOM VIEW



23
10B
11
10A

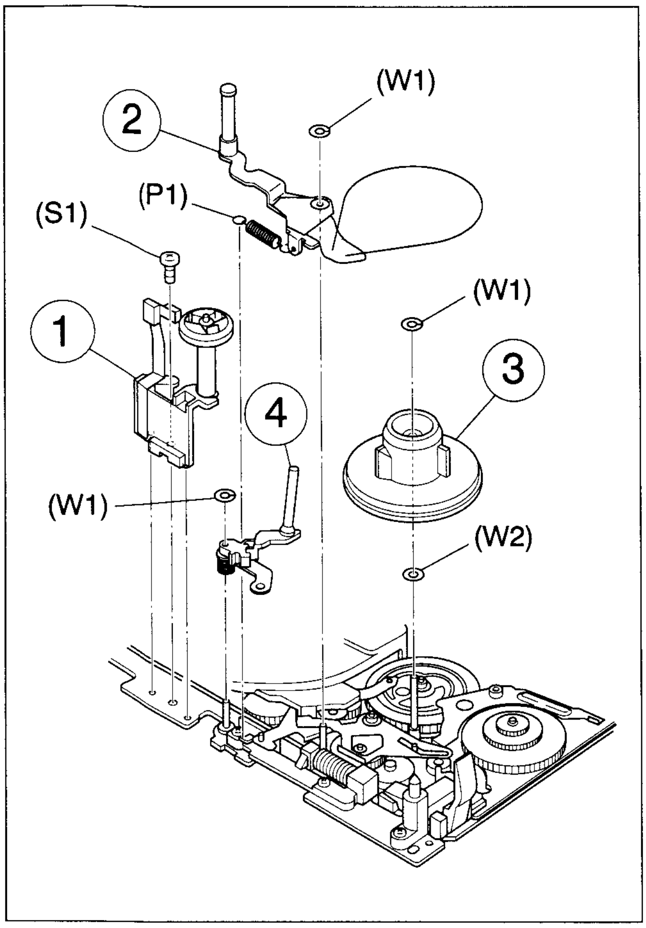

2
(W1)
(P1)
(S1)
1
(W1)
3
4
(W1)
(W2)

Fig. M1

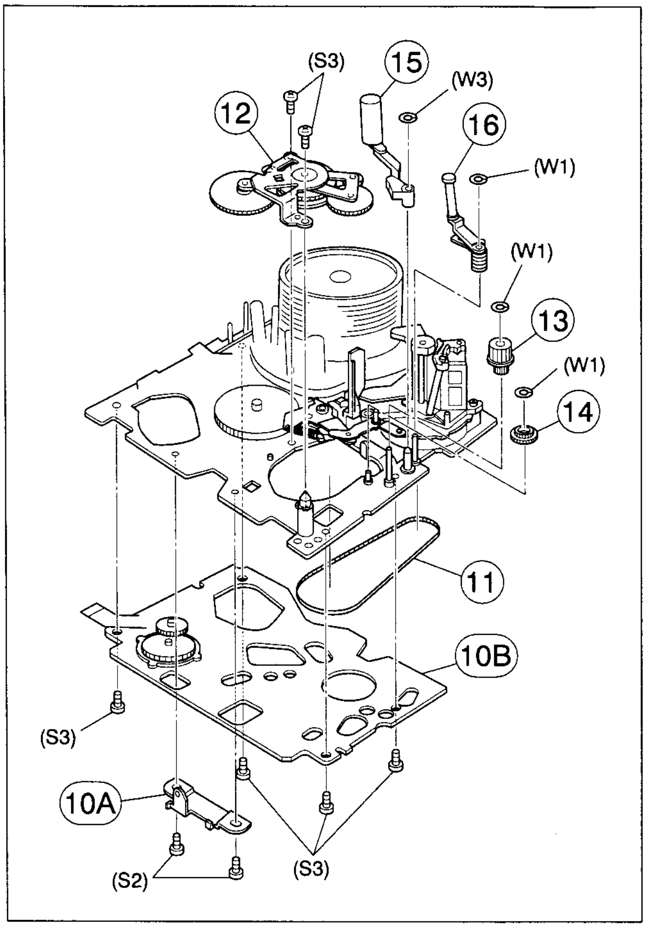

(S3)
15
(W3)
12
16
(W1)
(W1)
13
(W1)
14
11
10B
(S3)
10A
(S2)
(S3)

Fig. M3

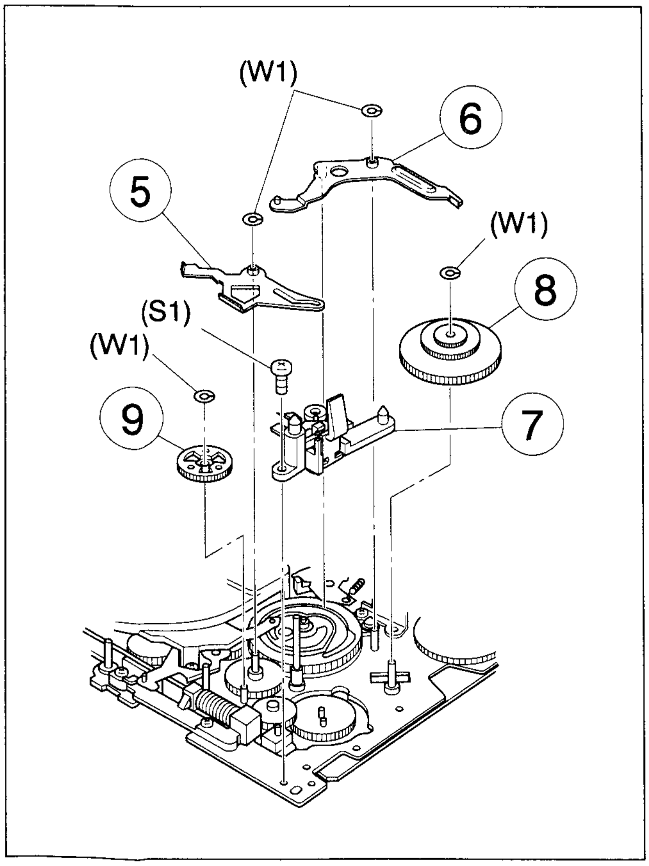
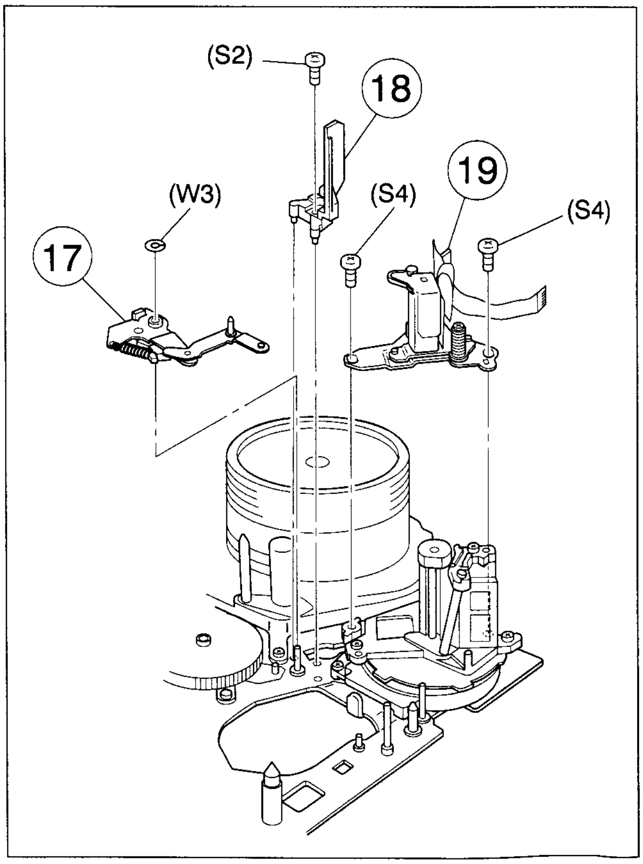

(W1)
6
5
(W1)
8
(S1)
(W1)
7
9

Fig. M2


(S2)
18
(W3)
(S4)
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(S4)
17

Fig. M4

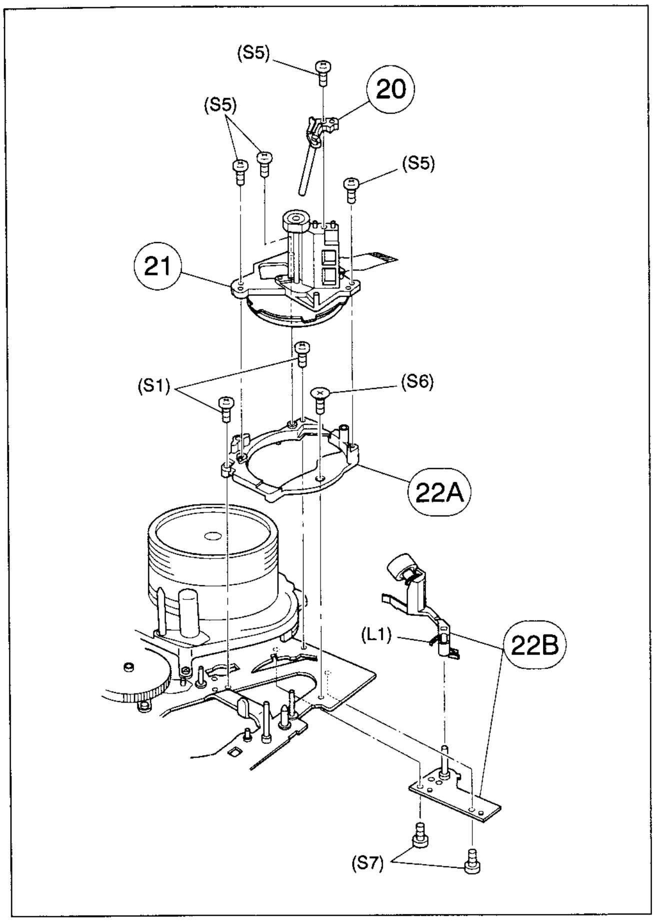

(S5)
(S5)
20
(S5)
21
(S1)
(S6)
22A
(L1)
22B
(S7)

Fig. M5

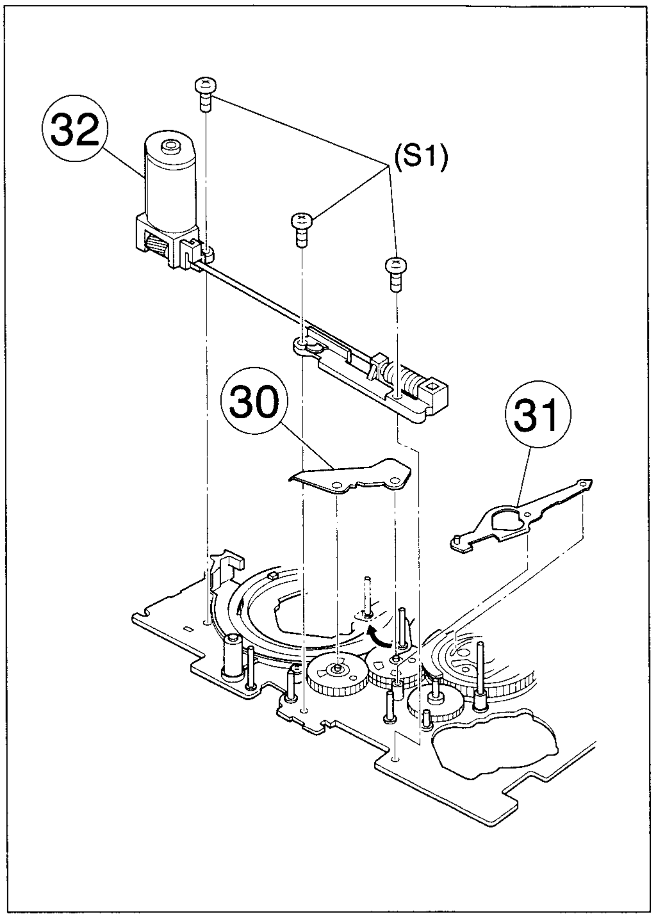


Fig. M7

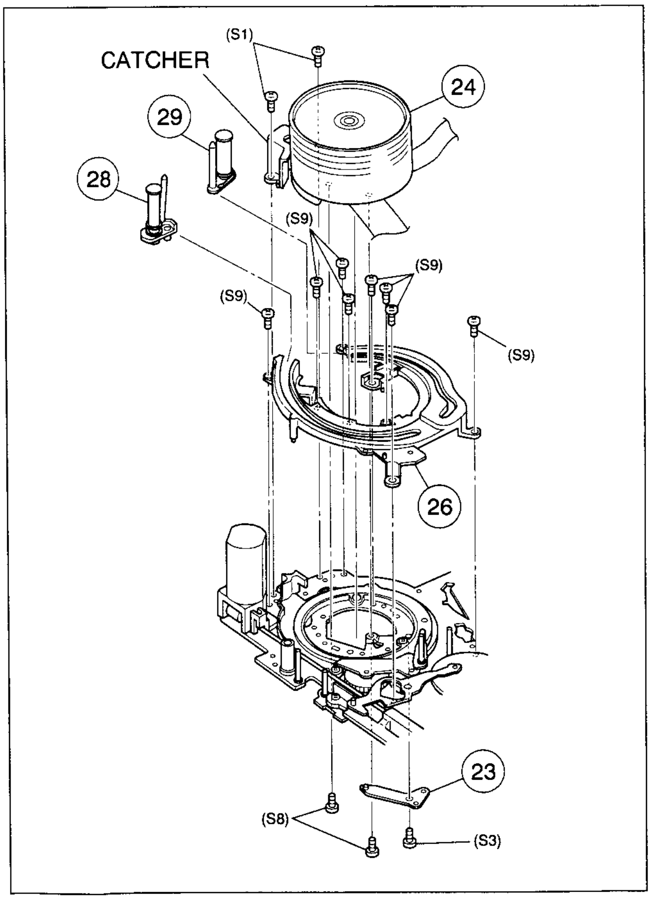

(S1)
CATCHER
24
29
28
(S9)
(S9)
(S9)
(S9)
26
23
(S8)
(S3)

Fig. M6

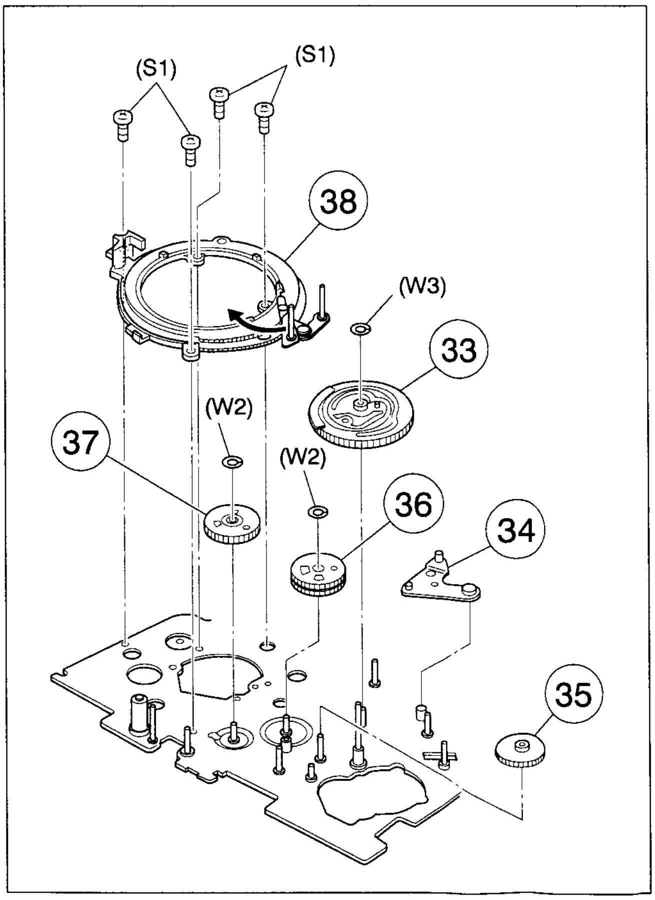

(S1)
(S1)
38
(W3)
33
(W2)
37
(W2)
36
34
35

Fig. M8

2.3 REPLACEMENT OF UPPER DRUM

Note: *Be very careful not to touch any hand of a new upper drum as well as not to damage the drum.*

2.3.1 Removal of upper drum

1. Carefully unsolder at 10 points shown in Fig. 2-3-1 on the UPPER DRUM board.

   Note: *If solder is not completely removed, it may cause damage of the head pins when the upper drum is removed.*

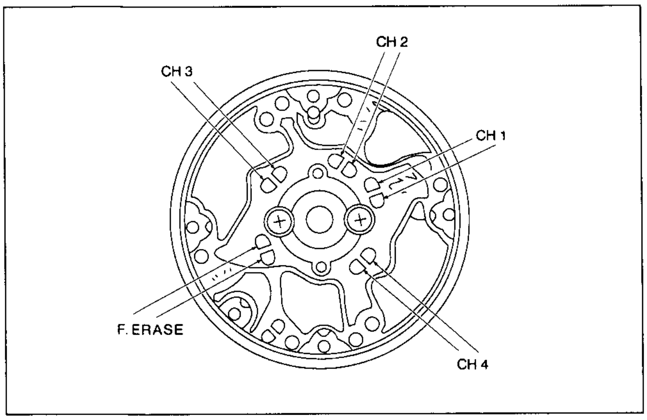


Fig. 2-3-1 Upper drum replacement (1)

2. Remove two screws and draw out the upper drum in the direction of the arrow.

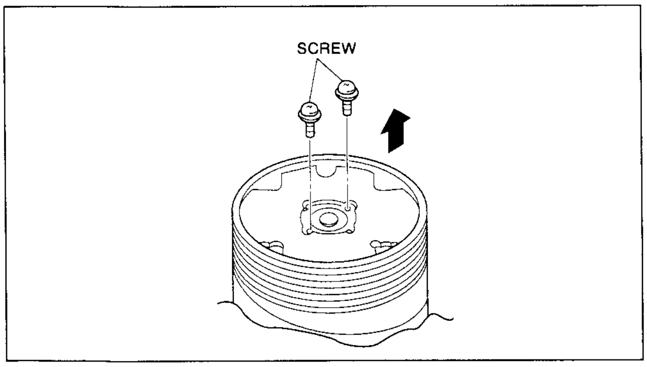


Fig. 2-3-2 Upper drum replacement (2)

3. When it is hard to remove the upper drum, set the upper drum removal tool (YTU94031A) with the screws which are once removed in the step 2, and tighten the center screw to remove it easily.

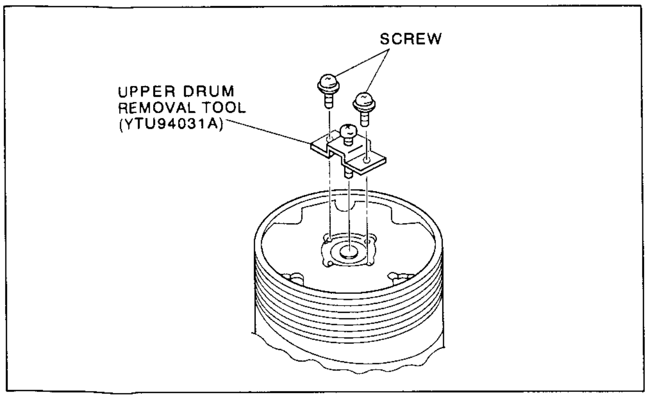


Fig. 2-3-3 Upper drum replacement (3)

2.3.2 Installation of new upper drum

1. Before installing a new upper drum, insert a soldering iron (50 W) into the hole of the upper drum and heat it for about 3 to 5 minutes to expand it.

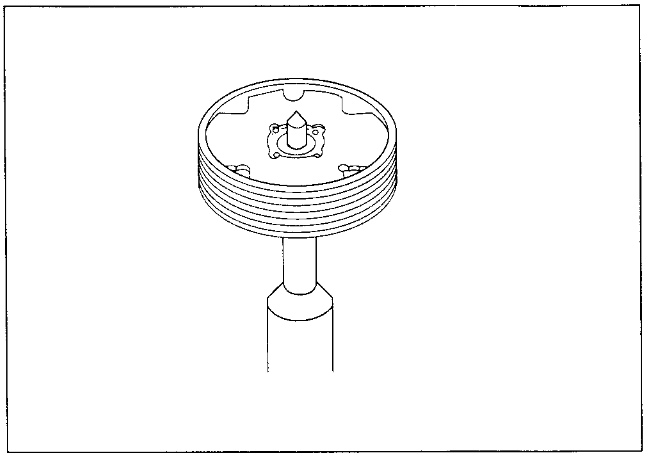


Fig. 2-3-4 Upper drum replacement (4)

2. Install the new upper drum so that its arrow marking is positioned at an angle of 140° to the rotary transformer's mold (having no relay pin) of the lower drum.

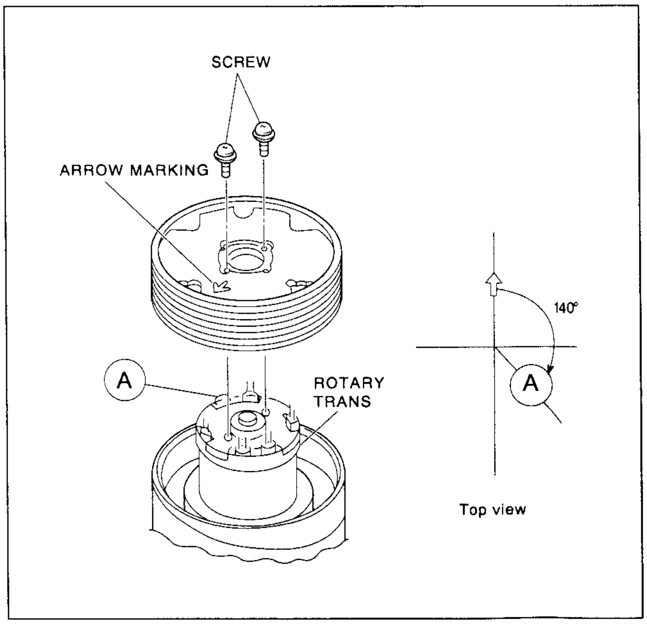


Fig. 2-3-5 Upper drum replacement (5)

3. Tighten the screws lightly first, then, alternately tighten them gradually as the upper drum is cooled.
4. After replacement finishes, make sure to check up and deck section adjust.

2.5 TAPE TRANSPORT ADJUSTMENT

In most cases the deck section is in need electrical adjustment, it results from replacement of worm mechanical parts or video heads. In the event of malfunction with electrical circuits, troubleshouting with the aid of proper test instruments most be done first, and then commence necessary repair, replacement and adjustment, etc.

2.5.1 Required adjustment tools

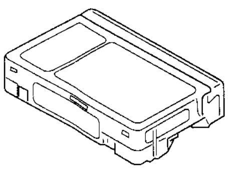
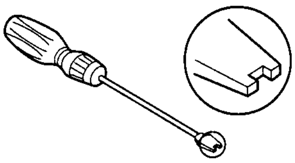
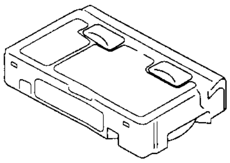
Alignment tape for SP interchangeability (MHPE-C)	Roller driver PTU94002
	
Casette torque meter PUJ50431-2	
	

Table 2-5-1

2.5.2 Back tension

1. Set a cassette torque meter onto the deck and measure the back tension in standard REC mode to confirm that the back tension is 9.5 – 17.5 gf•cm.
2. If not, replace the tension band.
   When the value widely fluctuates in the measurement, replace the supply reel disk.
3. With the cassette torque meter, confirm that the play torque is 15 – 25 gf•cm.
   If necessary, replace the center pully unit.

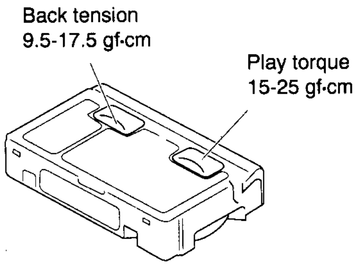


Fig. 2-5-1 Cassette torque meter

2.5.3 Tape pattern

1. Observe signal at pin 2 of CN20 (V. TP FM) with external trigger from pin 5 of CN20 (V. H. FF) on the MAIN board.
2. Play back the SP stairstep signal of the alignment tape, and maximize the FM waveform by the tracking button.
3. Set the tracking control to the center position by simultaneously pressing the tracking (–) and (+) buttons and maximize the FM waveform by the tracking button.
4. If the observed FM waveform is not flat, adjust the height of the supply of take-up guide roller with the roller driver (PTU94002).

   Note: *To prevent the tape from damage, turn the guide rollers slowly.*
5. By operating the tracking button (both in + and – directions) in the manual tracking mode, vary the output level of the FM waveform from maximum to minimum and vice versa to confirm that the waveform varies nearly in a flat shape.
6. When the FM waveform breaks in the level varying process, subtly adjust the height of guide rollers at every breaking point so that the waveform varies as flat as possible.
   Repeat the above steps 5. and 6. several times to confirm that the waveform is flat as a whole.

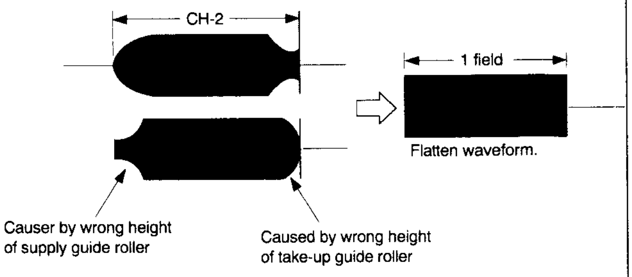


Fig. 2-5-2 FM waveform-1

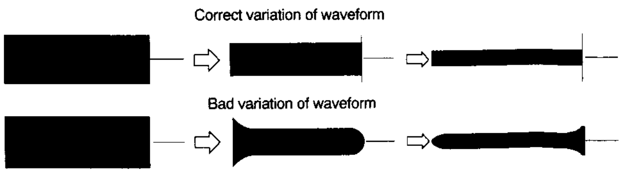


Fig. 2-5-3 FM waveform-2

2.4 CHECKUP AND ADJUSTMENT OF MECHANISM PHASE

Note: *Pay careful attention to the installing order and phase of mechanism parts of the loading system.*

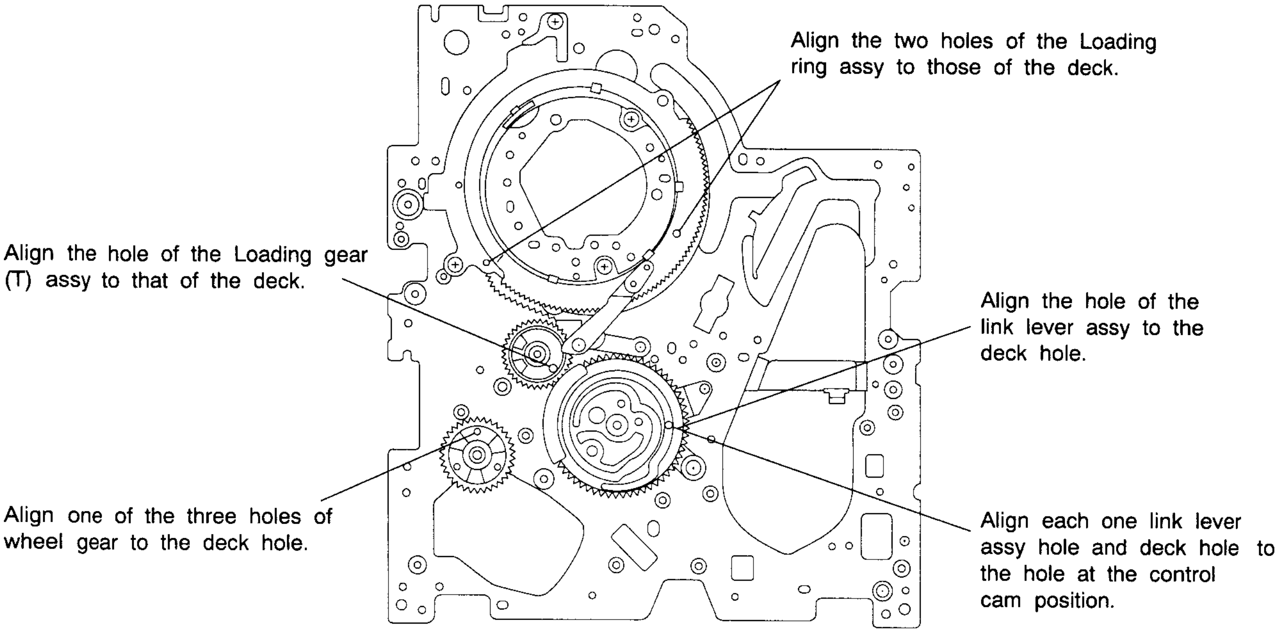

Align the two holes of the Loading ring assy to those of the deck.
Align the hole of the Loading gear (T) assy to that of the deck.
Align the hole of the link lever assy to the deck hole.
Align one of the three holes of wheel gear to the deck hole.
Align each one link lever assy hole and deck hole to the hole at the control cam position.

Fig. 2-4-1 TOP OF MAIN DECK

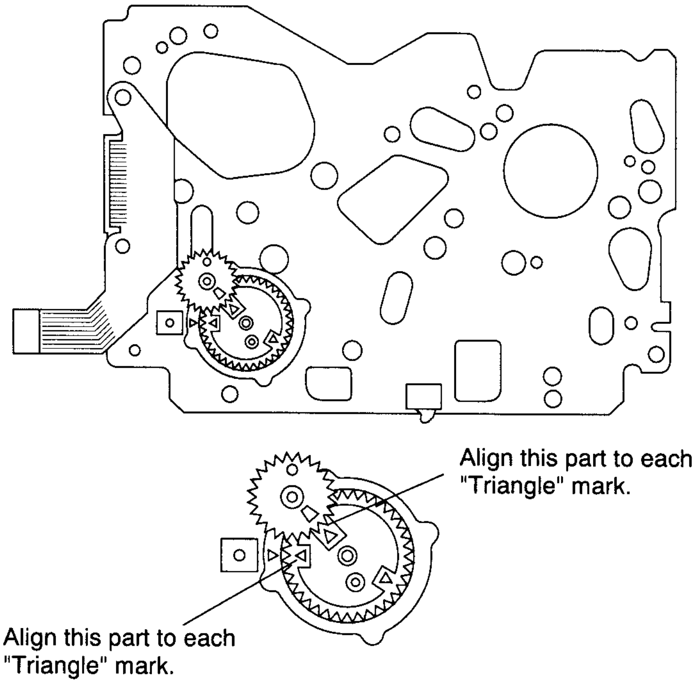

Align this part to each "Triangle" mark.
Align this part to each "Triangle" mark.

Fig. 2-4-2 SENSOR BOARD

7. Through the above steps, confirm that there occur no wrinkling and damage in the tape around the pinch roller and TU guide pole whenever the deck is in operation of Loading/Unloading, Search Rewind and at mode change from Search Rewind to play mode. If wrinkling or damage in the tape occurs around the TU guide pole, adjust the angle (slant) of the A/C head to the tape. So that the tape normally runs along the lower flange of the guide pole.

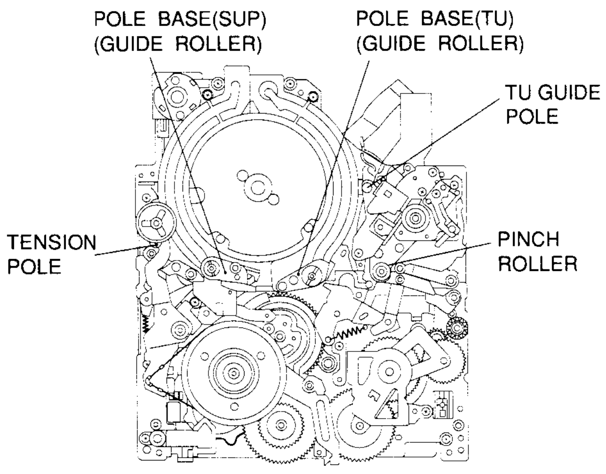

POLE BASE(SUP)
(GUIDE ROLLER)
POLE BASE(TU)
(GUIDE ROLLER)
TU GUIDE
POLE
TENSION
POLE
PINCH
ROLLER

Fig. 2-5-4 Tape transport system

2.5.4 A/CTL head height & azimuth

1. Play back the SP 6 kHz segment of the alignment tape and observe waveform at AUDIO OUT.
2. Turn the screw Ⓐ, Ⓑ (tilt) and Ⓒ (azimuth) gradually (at an angle of 45°approx.) in the same direction to obtain the maximum output level.
3. As final fine adjustment, adjust the screw Ⓑ for minimum level fluctuation and the screw Ⓒ for maximum output level.

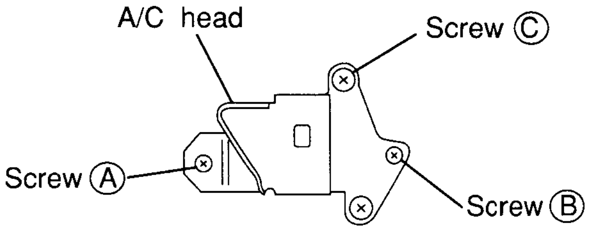

A/C head
Screw Ⓒ
Screw Ⓐ
Screw Ⓑ

Fig. 2-5-5 A/C head

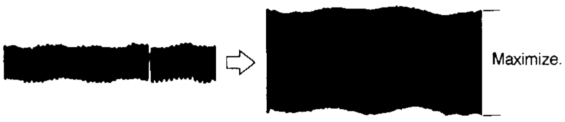


Fig. 2-5-6 Audio signal

2.5.5 Phase of control head (X value)

1. Play back the SP stairstep signal of the alignment tape and observe signal at pin 2 of CN20 (V.TP FM) with external trigger from pin 5 of CN20 (V.H.FF) on the MAIN board.
2. Operate the tracking button in the center and manual tracking mode by pressing the tracking (+) and (–) buttons and confirm that the FM output level is maximum at the center position as shown in Fig. 2-5-8.
3. If necessary, slightly loosen the setscrews Ⓓ and Ⓔ and insert the Tweezers into the notch and guide hole to move the A/C head fully in the direction of the capstan to the extent.
4. Gradually move the A/C head toward the drum to find the position where the FM output level maximum for the first time (a' – b' in Fig. 2-5-8).
5. Fine adjust the phase of the A/C head and tighten the screws Ⓓ and Ⓔ at the point a.
6. Confirm that the above steps 2. and 5. are satisfactory at the same time.
   If not, repeat the steps 3. through 5..

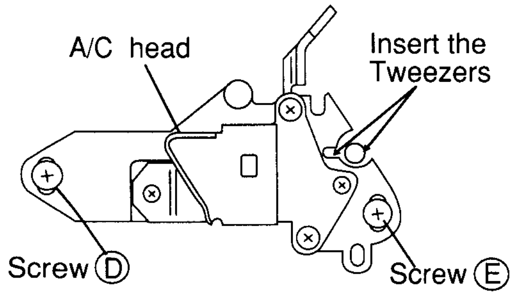


Fig. 2-5-7 Phase of control head

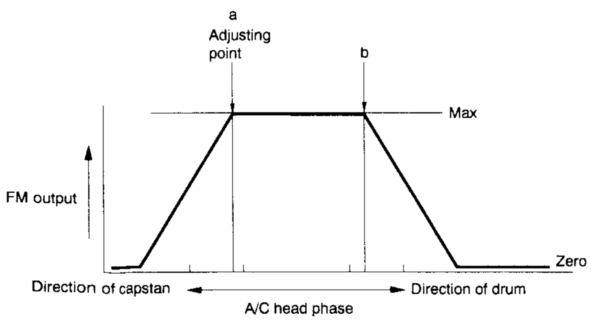


Fig. 2-5-8 Phase adjustment point of control head

2.6 REMARKS

2.6.1 Cleaning

1. For cleaning of the upper drum (particularly video heads), use fine-woven cotton cloth or Kimwipe with alcohol soaks through. Do not move the cloth but turn the upper drum counterclockwise.

   Note: ***Make sure not to move the cloth in the vertical direction to the video head, since it may cause damage of the video heads.***

2. For cleaning of parts of the tape transport system except the upper drum, use fine-woven cotton cloth or cotton swab soaked alcohol.
3. After cleaning, confirm that the cleaned parts are completely dry before loading the deck with cassette tape.

2.6.2 Applying oil and grease

1. Periodical oiling and greasing are not required but should be done to new parts when replacing. If oil and grease on the other parts of the other party are old and dirty, wipe them clean and apply new oil or grease.
2. For parts and points to apply oil and grease, refer to the exploded view of the mechanism assembly (M3).
   Table 2-6-1 specifies oil and grease to be used.
3. When oiling, clean the objective parts with alcohol first and apply one or two drop(s) of oil. Too much oiling causes rotary parts to slip because of oil leakage.

Classification	Name	Part No.	Symbol in drawing
Grease	Grease	KYODO-SH-P	AA
Oil	Cosmo Hydro HV100	YTU94027	BB

Table 2-6-1 Specific oil and grease to be used

2.6.3 Checkup

After replacement of the supply reel disk and tension band, make sure to inspect beck tension according to the adjustment procedure of MECHANISM ADJUSTMENT section.

SECTION 3
ELECTRICAL ADJUSTMENT

3.1 ELECTRICAL ADJUSTMENT

3.1.1 PREPARATION

1. Precaution

This model does not contain adjustment controls (VR). General deck system and camera system adjustment are not required. However, if MAIN board need replacement, please use original E^2PROM on to new board. Then adjustment are not required. And if parts such as the following need replacement, special computerized adjustment are required (Refer to sec. 3.1.1-5). Please contact to JVC service for detaile information.

- OP block
- E^2PROM (IC903 of MAIN board)

In the event of malfunction with electrical circuits, troubleshooting with the aid of proper test instruments most be done first, and then commence necessary repair, replacement and adjustment, etc.

1. In case of wiring to chip test points for measurement, use IC clips, etc. to avoid any stress.
2. Since connectors are fragile, carefully handle them in disconnecting and connecting.
3. Shortcircuit between operation un it and DECK chassis.

2. Required test equipment

1. Color TV monitor.
2. AC power adapter (AA-V11 and AA-V6 or equivalent).
3. Oscilloscope (dual-trace type, for more than 20 MHz).
4. Digital voltmeter
5. Personal computer

3. Required adjustment tools

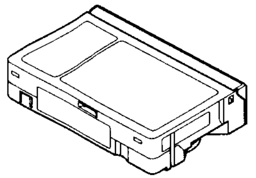
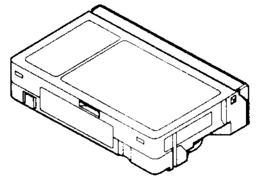
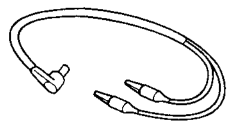
Alignment tape for SP Interchangeability (MHPE-C)	Alignment tape for N. SP PB Y/C level (MHVE-2C)
	
Power cord YTU94060A	
	

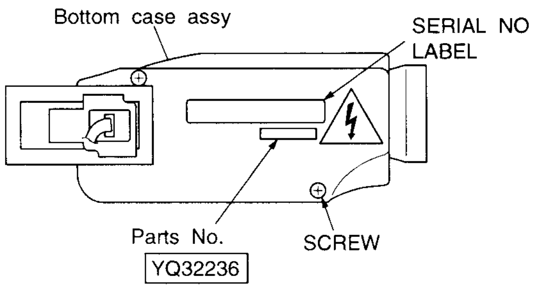
Table 3-1-1 Required adjustment tools

4. Setup for E. VF section adjustment

Note:

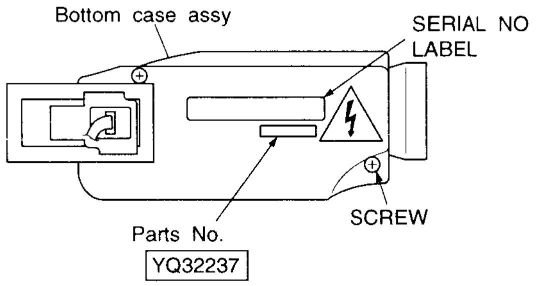
- *There are two types of E. VFs for this model.*
- *The adjustment procedure of them are different. For performing the adjustment, please follow the item mentioned on the figure below.*

<TYPE M> (YQ32236)



Adjustment Item : 3.2

<TYPE T> (YQ32237)



Adjustment Item : 3.3

- *Referring to "sec. 1. DISASSEMBLE" and connect the E. VF connector of the E. VF board to CN14 of the MAIN board of deck section.*

5. Required adjustment tools for Service support system

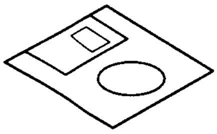
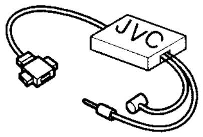
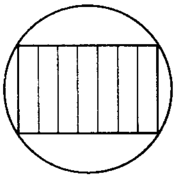
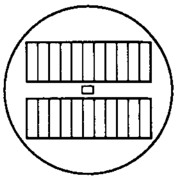
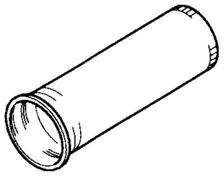
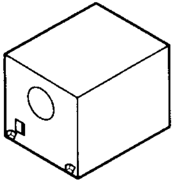
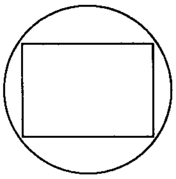
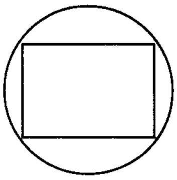
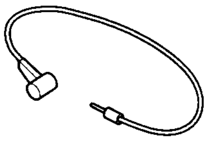
service suport system software YTU94057-17	Interface cable YTU93063	Color bar chart YTU92001-051	Gray scale chart YTU92001-052
			
Infinity adjustment lens YTU92001B	Light box YTU93072	White balance chart YTU92001-053	Skintone chart YTU92001-054
			
Adapter cable YTU94066			
			

Table 3-1-2 Required adjustment tools for Service support system

6. Connections for Service support system

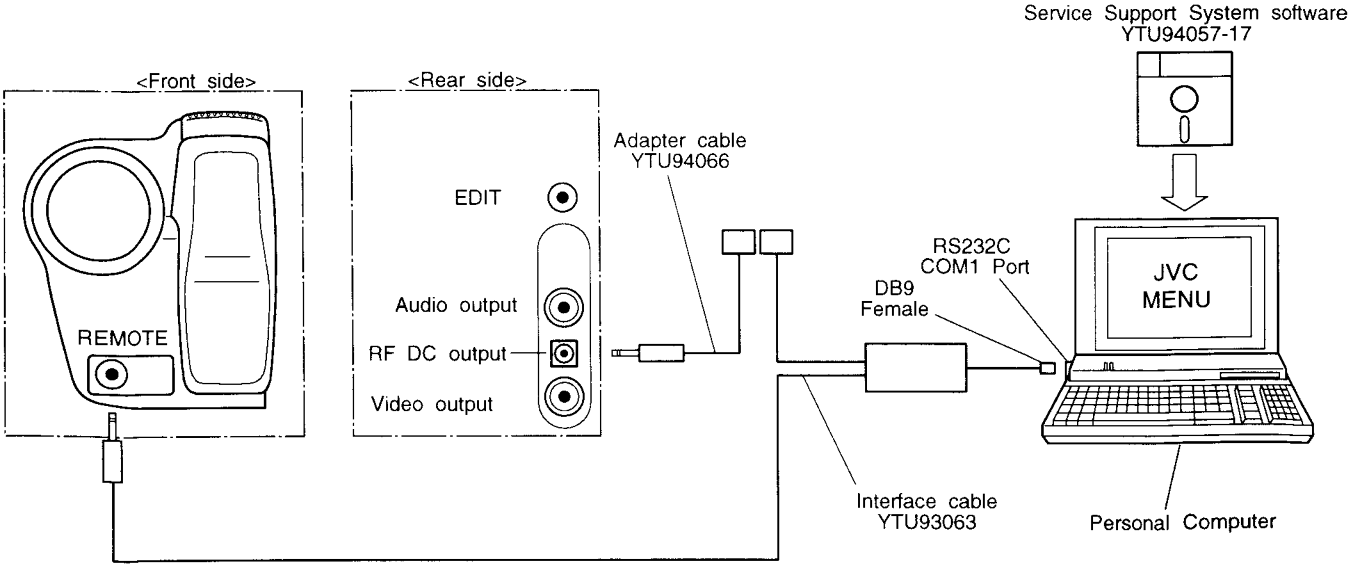
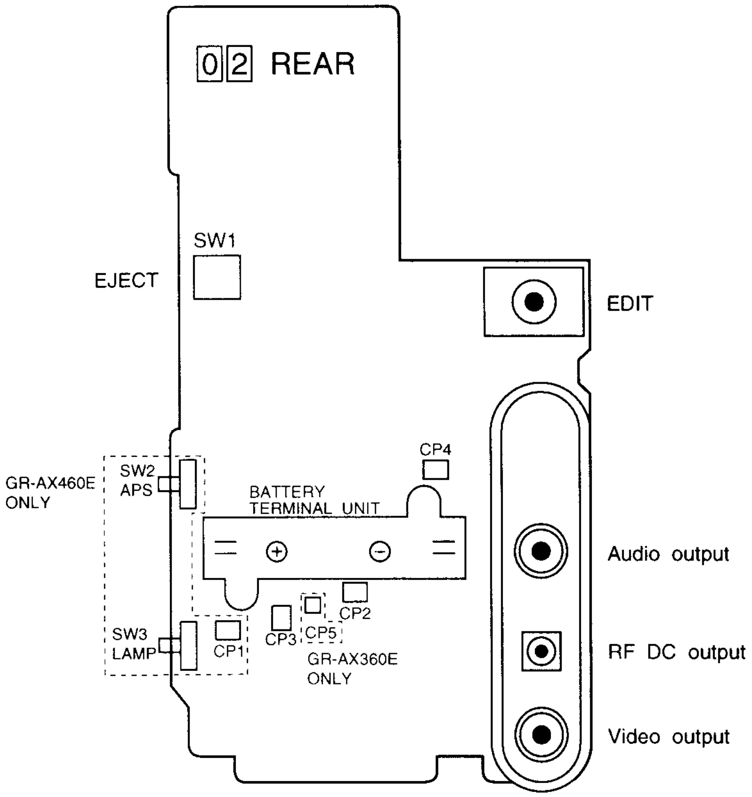

Service Support System software
YTU94057-17
<Front side>
REMOTE
<Rear side>
EDIT
Audio output
RF DC output
Video output
Adapter cable
YTU94066
RS232C
COM1 Port
DB9
Female
JVC
MENU
Interface cable
YTU93063
Personal Computer

Fig. 3-1-1 Connection for Service support system

■ CIRCUIT PROTECTOR AND BATTERY TERMINAL LOCATION FOR REAR BOARD

-REAR-

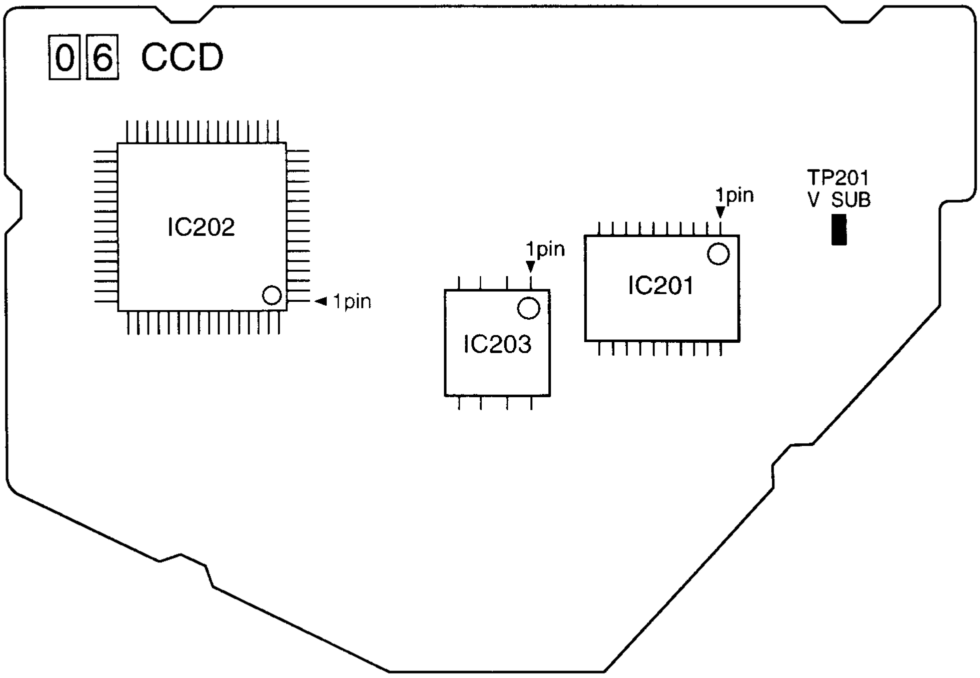


0 2 REAR
SW1
EJECT
EDIT
CP4
SW2
APS
GR-AX460E
ONLY
BATTERY
TERMINAL UNIT
Audio output
CP2
CP3
CP5
SW3
LAMP
CP1
GR-AX360E
ONLY
RF DC output
Video output

Fig. 3-1-2 Circuit protector and battery terminal location for REAR board assembly

■ AJUSTMENT ELEMENT LOCATION FOR CAMERA SECTION

-CCD-



0 6 CCD
IC202
1pin
TP201
V SUB
1pin
1pin
IC201
IC203

Fig. 3-1-3 Adjustment element location for CCD board assembly

3.2 ELECTRONIC VIEWFINDER (E. VF) ADJUSTMENT <TYPE M> (For GR-AX260E, AX460E)

Notes: *Unless otherwise specified, all measurement points and adjustment parts are located on E. VF board.*

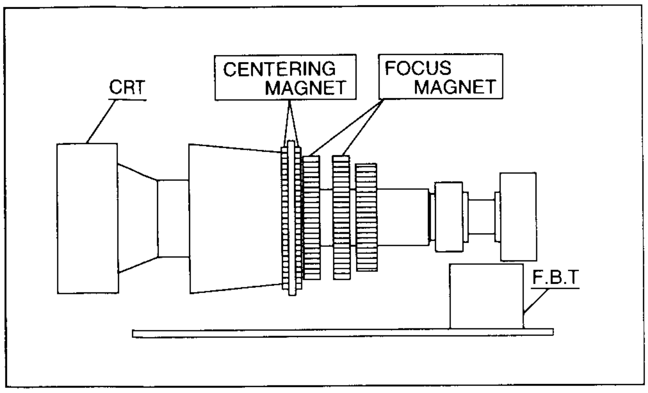


Fig. 3-2-1 E. VF

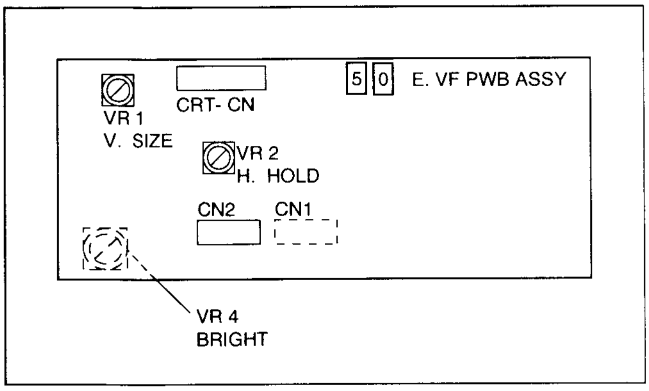


Fig. 3-2-2 E. VF board

3.2.1 Horizontal sync.

Subject	• Alignment tape [MHPE-C] • Stairstep
Mode	• PB
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• VR2 (H. HOLD)
Specification	• The midpoint of the two markings

1) Observing the viewfinder screen, turn VR2 fully clockwise to make the picture unstable.
2) Slowly return VR2 counterclockwise to find a point where the picture becomes stable, and mark this position.
3) Turn VR2 fully counterclockwise to make the picture unstable in the same manner as 1) above.
4) Slowly return VR2 clockwise until the picture becomes stable, and mark this position.
5) Finally set VR2 to the midpoint between the two markings of 2) and 4).

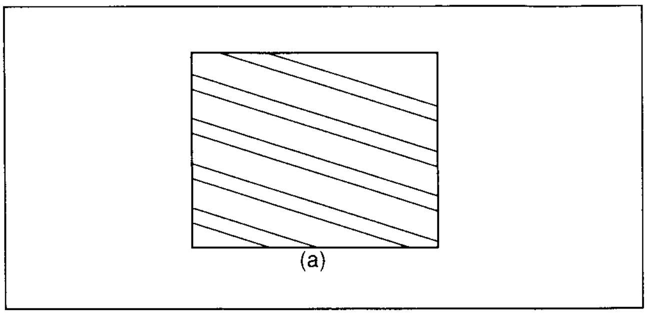


Fig. 3-2-3 Horizontal sync. 1

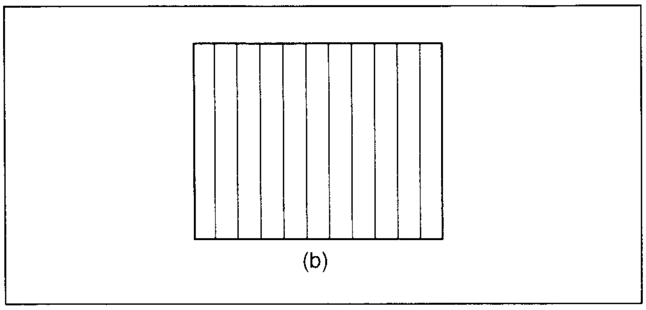


Fig. 3-2-4 Horizontal sync. 2

3.2.2 PLL adjustment

Subject	• Camera picture
Mode	• EE
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• VR1 (V. SIZE)
Specification	• Normal picture amplitude

1) Observing the viewfinder screen, adjust VR1 for normal picture amplitude.

3.2.3 Centering

Subject	• Alignment tape [MHPE-C] • Stairstep
Mode	• PB
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• Centering magnet (CRT assy)
Specification	• The center of the E. VF screen

1) While observing the viewfinder screen, adjust the centering magnet to locate the stairstep in the center of the viewfinder screen.

3.2.4 Focus

Subject	• Camera picture
Mode	• EE
Equipment	• E. VF
Measurment point	• E. VF screen
Adjustment part	• Focus magnet (CRT assy)
Specification	• The centre area is clear and defined

1) While observing the viewfinder screen, adjust the focus magnet for the deflecting yoke so that the picture at the central area of the screen is clear and defined.

3.2.5 Brightness

Subject	• -
Mode	• EE • Lens closed
Equipment	• E. VF
Measurment point	• E. VF screen
Adjustment part	• VR4 (BRIGHT)
Specification	• The CRT raster is just barely visible

1) Close the lens with the cap and adjust VR4 so that the raster of the CRT is just visible in the E. VF.

3.3 ELECTRONIC VIEWFINDER (E. VF) ADJUSTMENT <TYPE T> (For GR-AX260E, AX460E)

Notes:

- *Unless otherwise specified, all measurement points and adjustment parts are located on E. VF board.*
- *After adjustment or replacement of the deflection yoke or the centering magnet, fix it by the band as shown the figure below.*

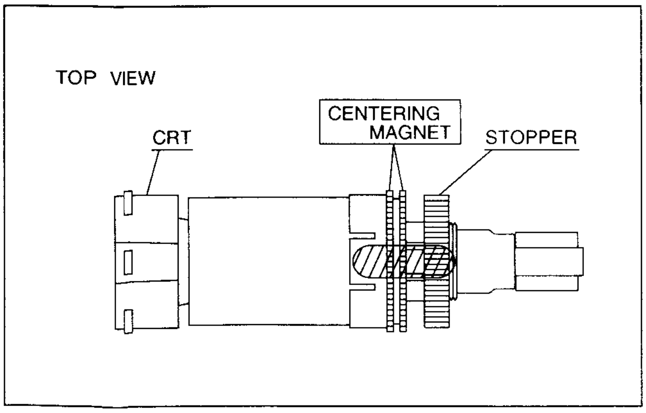


Fig. 3-3-1 E. VF

- *After adjustment is completed, compare the picture on the E. VF screen with the monitor TV.*

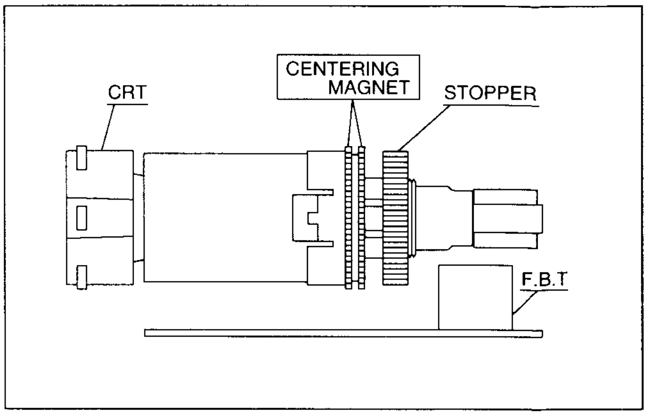


Fig. 3-3-2 E. VF

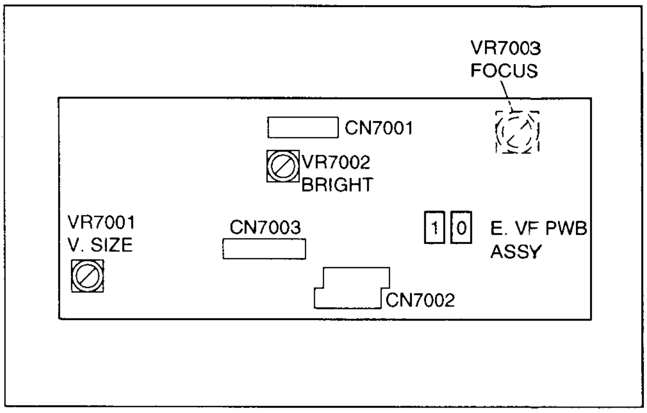


Fig. 3-3-3 E. VF board

3.3.1 Tilt

Subject	• Alignment tape [MHPE-C] • Stairstep
Mode	• PB
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• Deflection yoke
Specification	• The picture is visible as same as monitor TV.

1) Put the deflection yoke to the most inner side of CRT neck first. Then fix the stopper temporary.
2) Adjust the tilt of picture on the E. VF screen by tilting the deflection yoke.
3) Fix the stopper completely.

3.3.2 Centering

Subject	• Alignment tape [MHPE-C] • Stairstep
Mode	• PB
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• Centering magnet (CRT assy)
Specification	• The centre of the E. VF screen

1) While observing the viewfinder screen, adjust the centering magnet to locate the stairstep in the centre of the viewfinder screen.

3.3.3 Vertical scanning

Subject	• Camera picture
Mode	• EE
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• VR7001 (V. SIZE)
Specification	• Normal picture amplitude

1) Observing the viewfinder screen, adjust VR7001 for normal picture amplitude.

3.3.4 Brightness

Subject	• –
Mode	• EE • Lens closed
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• VR7002 (BRIGHT)
Specification	• The CRT raster is just barely visible

1) Close the lens with the cap and adjust VR7002 so that the raster of the CRT is just visible in the E. VF.

3.3.5 Focus

Subject	• Camera picture
Mode	• EE
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• VR7003 (FOCUS)
Specification	• The centre area is clear and defined

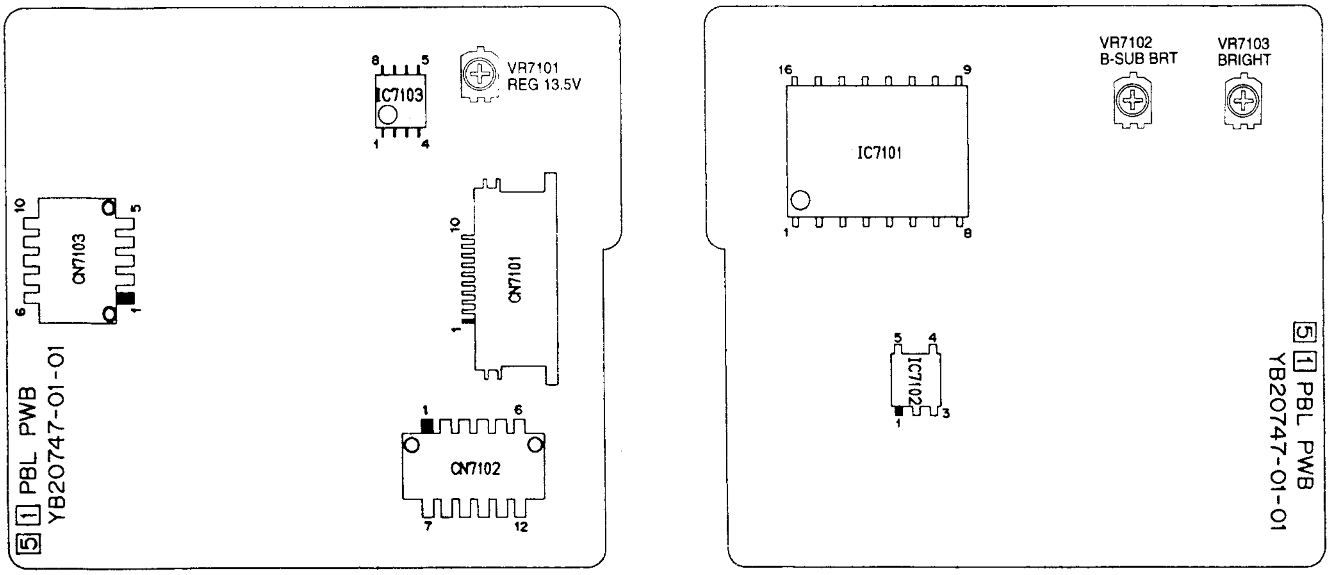
1) While observing the viewfinder screen, adjust VR7003 so that the picture at the central area of the screen is clear and defined.

3.4 COLOR VIEWFINDER SECTION ADJUSTMENT (FOR GR-AX360EG)

Notes: *Unless otherwise specified, all measurement points and adjustment parts are located on CLD board.*

■ ADJUSTMENT ELEMENT LOCATION FOR COLOR VIEWFINDER SECTION

-PBL-

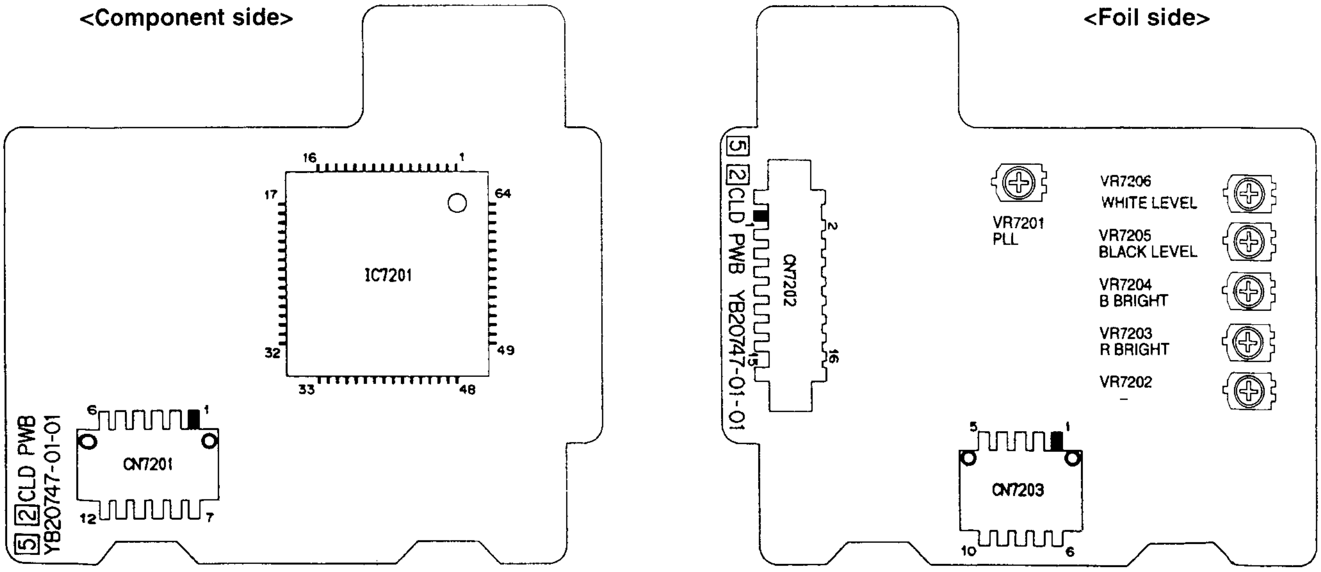

<Component side>

<Foil side>

IC7103
VR7101
REG 13.5V
CN7103
CN7101
CN7102
5 1 PBL PWB
YB20747-01-01
VR7102
B-SUB BRT
VR7103
BRIGHT
IC7101
IC7102

Fig. 3-4-1 Adjustment element location for PBL board assembly

-CLD-


<Component side>

<Foil side>

IC7201
CN7201
5 2 CLD PWB
YB20747-01-01
CN7202
VR7201
PLL
VR7206
WHITE LEVEL
VR7205
BLACK LEVEL
VR7204
B BRIGHT
VR7203
R BRIGHT
VR7202
CN7203

Fig. 3-4-2 Adjustment element location for CLD board assembly

3.4.1 REG 13.5 V

Subject	• -
Mode	• EE
Equipment	• Digital voltmeter
Measurement point	• CN7203 pin 6
Adjustment part	• VR7101 (REG 13.5 V) (PBL board)
Specification	• 13.5 ± 0.1 V DC

1) Connect a digital voltmeter to pin 4 of the CN7203.
2) Adjust VR7101 for 13.5 V DC.

3.4.2 PLL

Subject	• -
Mode	• EE
Equipment	• Oscilloscope
Measurement point	• CN7203 pin 4 (RPD)
Adjustment part	• VR7201 (PLL)
Specification	• "A" = 2.4 ± 0.1 V DC

1) Obvserve waveform at pin 4 of the IC7203.
2) Adjust VR7201 so that DC level of "A" (between the waveform center and GND, see Fig. 3-4-3) of a waveform becomes 2.4 V DC.

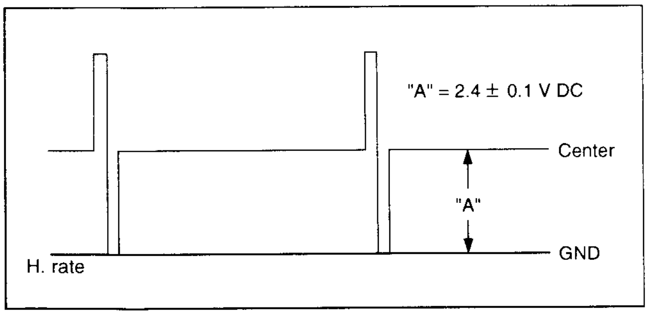


Fig. 3-4-3 PLL

3.4.3 WHITE LEVEL

Subject	• Alignment tape [MHPE-C] • SP stairstep
Mode	• PB
Equipment	• Oscilloscope
Measurement point	• CN7203 pin 3 (G OUT)
Adjustment part	• VR7206
Specification	• "A" = 1.7 ± 0.1 V DC

1) Obvserve waveform at pin 3 of the CN7203.
2) Adjust VR7206 so that DC level of "A" (between the waveform GND and TOP, see Fig. 3-4-4) of a waveform becomes 1.7 V DC.

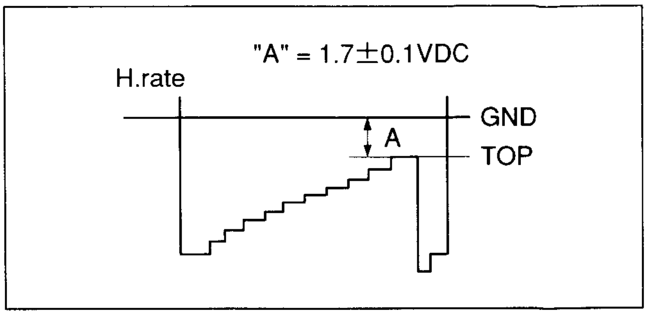


Fig. 3-4-4 WHITE LEVEL

3.4.4 BLACK LEVEL

Subject	• Alignment tape [MHPE-C] • SP stairstep
Mode	• PB
Equipment	• Oscilloscope
Measurement point	• CN7203 pin 3 (G OUT)
Adjustment part	• VR7205
Specification	• "A" = 4.0 ± 0.1 V DC

1) Obvserve waveform at pin 3 of the IC7203.
2) Adjust VR7205 so that DC level of "A" (between the waveform GND and Bottom, see Fig. 3-4-5) of a waveform becomes 4.0 V DC.

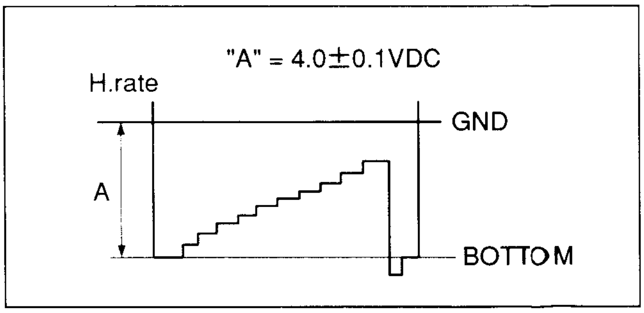


Fig. 3-4-5 BLACK LEVEL

3.4.5 R BRIGHT (WHITE BAL. R)

Subject	• Alignment tape [MHPE-C] • SP stairstep
Mode	• PB
Equipment	• Oscilloscope
Measurement point	• CN7203 pin ③(G OUT) • pin ⑦(R OUT)
Adjustment part	• VR7203
Specification	• "A" = 0.0 ± 0.1 Vp-p

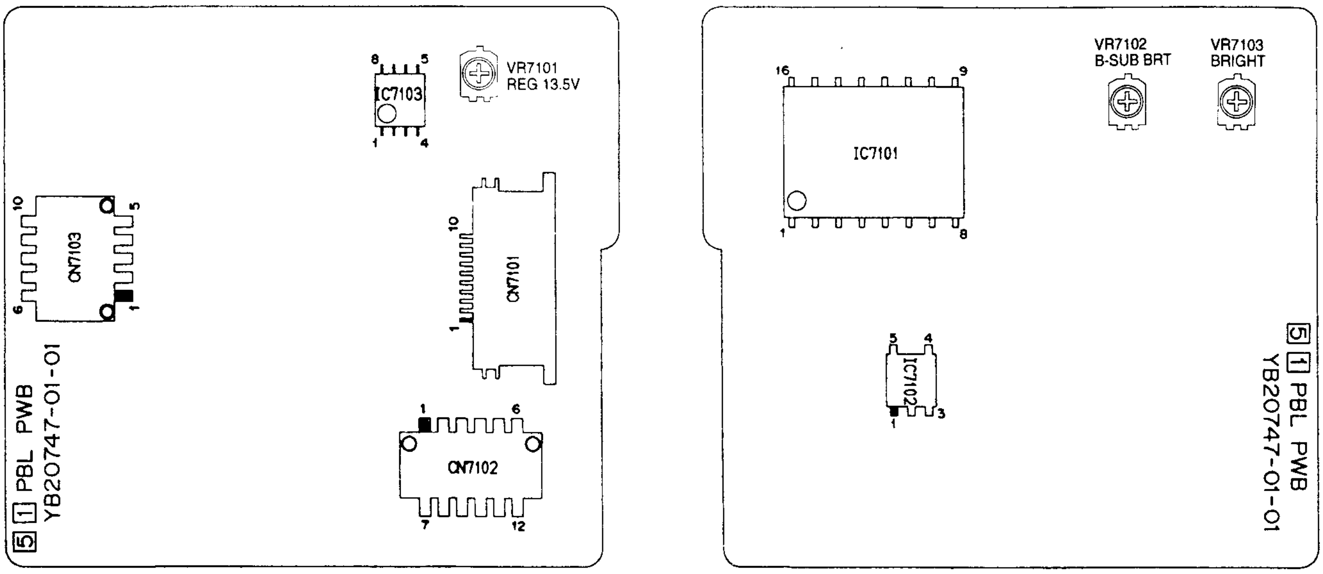
1) Connect channel 1 of the oscilloscope at pin 3 of CN7203.
2) Connect channel 12 of the oscilloscope at pin ⑦ of CN7203 in invert mode.
3) Observe two waveforms in add mode, then adjust VR7203 so that the signal level of "A" (the third step of stairstep signal) becomes 0.0 Vp-p.

3.4 COLOR VIEWFINDER SECTION ADJUSTMENT (FOR GR-AX360EG)

Notes: *Unless otherwise specified, all measurement points and adjustment parts are located on CLD board.*

■ ADJUSTMENT ELEMENT LOCATION FOR COLOR VIEWFINDER SECTION

-PBL-



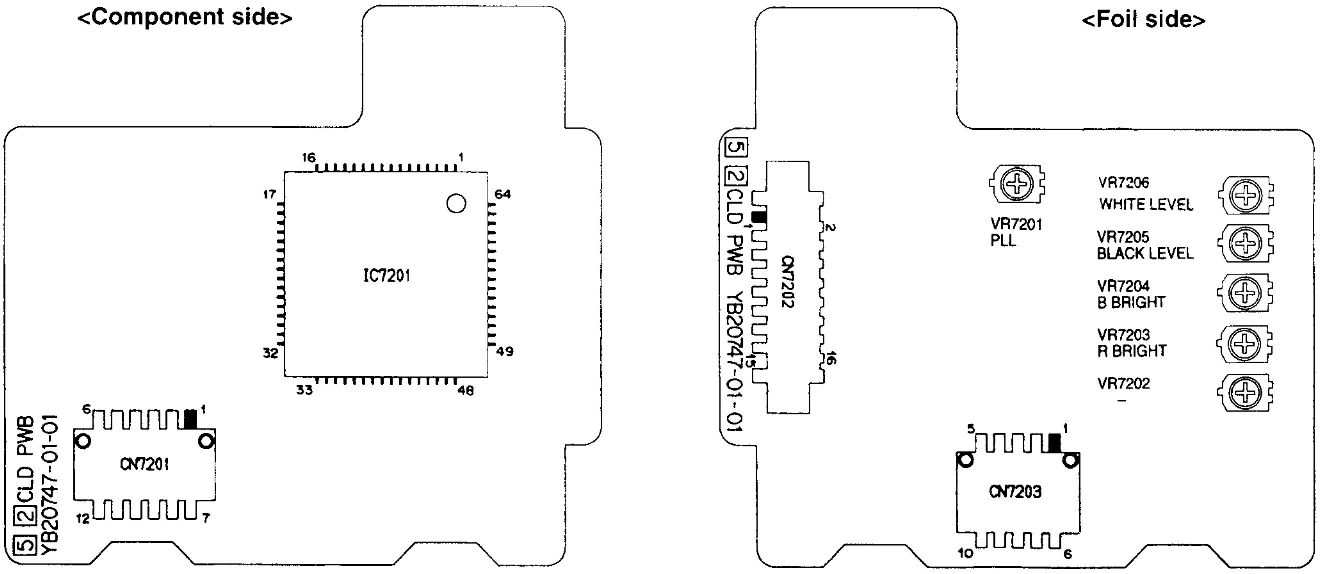
<Component side>

<Foil side>

VR7101
REG 13.5V
IC7103
CN7103
CN7101
CN7102
5 1 PBL PWB
YB20747-01-01
IC7101
VR7102
B-SUB BRT
VR7103
BRIGHT
IC7102
5 1 PBL PWB
YB20747-01-01

Fig. 3-4-1 Adjustment element location for PBL board assembly

-CLD-



<Component side>

<Foil side>

IC7201
CN7201
5 2 CLD PWB
YB20747-01-01
5 2 CLD PWB YB20747-01-01
CN7202
VR7201
PLL
VR7206
WHITE LEVEL
VR7205
BLACK LEVEL
VR7204
B BRIGHT
VR7203
R BRIGHT
VR7202
–
CN7203

Fig. 3-4-2 Adjustment element location for CLD board assembly

3.4.1 REG 13.5 V

Subject	• -
Mode	• EE
Equipment	• Digital voltmeter
Measurement point	• CN7203 pin 6
Adjustment part	• VR7101 (REG 13.5 V) (PBL board)
Specification	• 13.5 ± 0.1 V DC

1) Connect a digital voltmeter to pin 4 of the CN7203.
2) Adjust VR7101 for 13.5 V DC.

3.4.2 PLL

Subject	• -
Mode	• EE
Equipment	• Oscilloscope
Measurement point	• CN7203 pin 4 (RPD)
Adjustment part	• VR7201 (PLL)
Specification	• "A" = 2.4 ± 0.1 V DC

1) Obvserve waveform at pin 4 of the IC7203.
2) Adjust VR7201 so that DC level of "A" (between the waveform center and GND, see Fig. 3-4-3) of a waveform becomes 2.4 V DC.

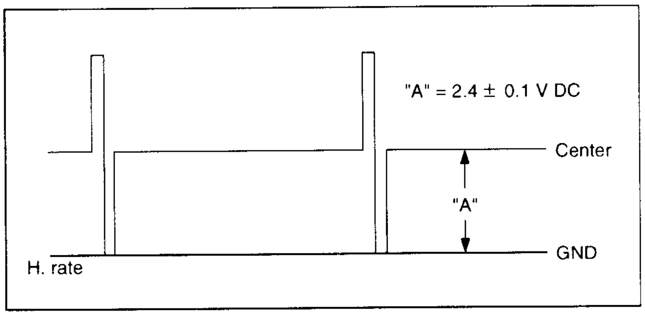


Fig. 3-4-3 PLL

3.4.3 WHITE LEVEL

Subject	• Alignment tape [MHPE-C] • SP stairstep
Mode	• PB
Equipment	• Oscilloscope
Measurement point	• CN7203 pin 3 (G OUT)
Adjustment part	• VR7206
Specification	• "A" = 1.7 ± 0.1 V DC

1) Obvserve waveform at pin 3 of the CN7203.
2) Adjust VR7206 so that DC level of "A" (between the waveform GND and TOP, see Fig. 3-4-4) of a waveform becomes 1.7 V DC.

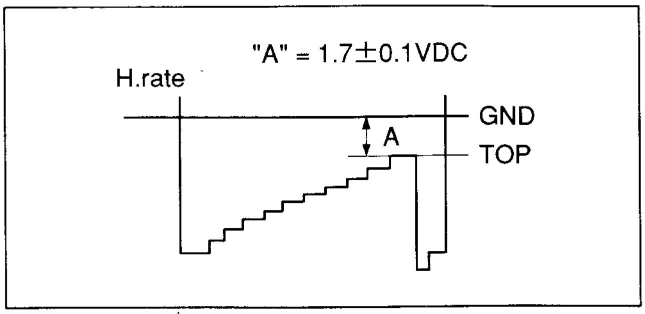


Fig. 3-4-4 WHITE LEVEL

3.4.4 BLACK LEVEL

Subject	• Alignment tape [MHPE-C] • SP stairstep
Mode	• PB
Equipment	• Oscilloscope
Measurement point	• CN7203 pin 3 (G OUT)
Adjustment part	• VR7205
Specification	• "A" = 4.0 ± 0.1 V DC

1) Obvserve waveform at pin 3 of the IC7203.
2) Adjust VR7205 so that DC level of "A" (between the waveform GND and Bottom, see Fig. 3-4-5) of a waveform becomes 4.0 V DC.

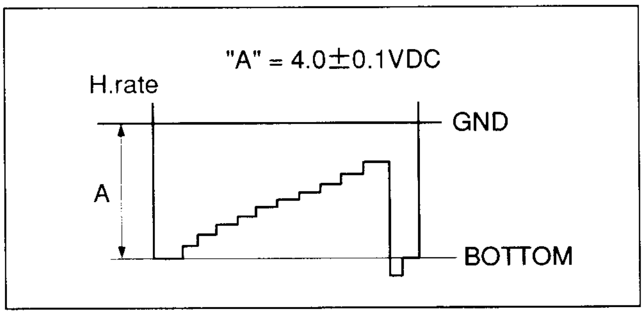


Fig. 3-4-5 BLACK LEVEL

3.4.5 R BRIGHT (WHITE BAL. R)

Subject	• Alignment tape [MHPE-C] • SP stairstep
Mode	• PB
Equipment	• Oscilloscope
Measurement point	• CN7203 pin ③ (G OUT) • pin ⑦ (R OUT)
Adjustment part	• VR7203
Specification	• "A" = 0.0 ± 0.1 Vp-p

1) Connect channel 1 of the oscilloscope at pin 3 of CN7203.
2) Connect channel 12 of the oscilloscope at pin ⑦ of CN7203 in invert mode.
3) Observe two waveforms in add mode, then adjust VR7203 so that the signal level of "A" (the third step of stairstep signal) becomes 0.0 Vp-p.

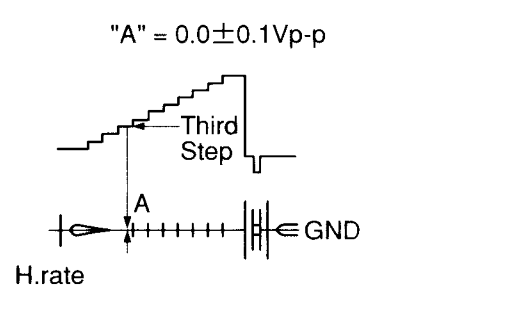

"A" = 0.0±0.1Vp-p
Third
Step
A
GND
H.rate

Fig. 3-4-6 R BRIGHT (WHITE BAL. R)

3.4.6 B BRIGHT (WHITE BAL B)

Subject	• Alignment tape [MHPE-C] • SP stairstep
Mode	• PB
Equipment	• Oscilloscope
Measurement point	• CN7203 pin ③ (G OUT) • pin ⑧ (B OUT)
Adjustment part	• VR7204
Specification	• "A" = 0.3 ± 0.1 Vp-p

1) Connect channel 1 of the oscilloscope at pin 3 of CN7203.
2) Connect channel 12 of the oscilloscope at pin ⑧ of CN7203 in invert mode.
3) Observe two waveforms in add mode, then adjust VR7204 so that the signal level of "A" (the third step of stairstep signal) becomes 0.3 Vp-p.

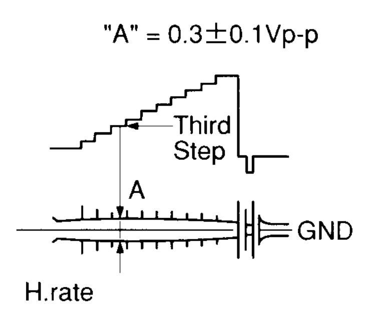

"A" = 0.3±0.1Vp-p
Third
Step
A
GND
H.rate

Fig. 3-4-7 B BRIGHT (WHITE BAL. B)

SECTION 4
CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions
The Components identified by the symbol ⚠ are critical for safety. For continued safety, replace safety critical components only with manufactures recommended parts.

1. Units of components on the schematic diagram

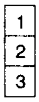
Unless otherwise specified.

1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).
   Chip resistors are 1/16 W.
   K: KΩ (1000Ω), M: MΩ (1000KΩ)
2) All capacitance values are in μF, (P: PF).
3) All inductance values are in μH, (m: mH).
4) All diodes are 1SS133, MA165 or IN4148M (refer to parts list).

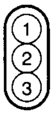
2. Indications of control voltage

AUX : Active only at high.
$\overline{\text{AUX}}$ or AUX(L) : Active at low.

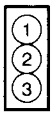
3. Interpreting Connector indications



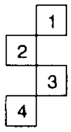
Removable connector



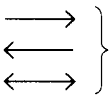
Wire soldered directly on board



Non-removable Board connector



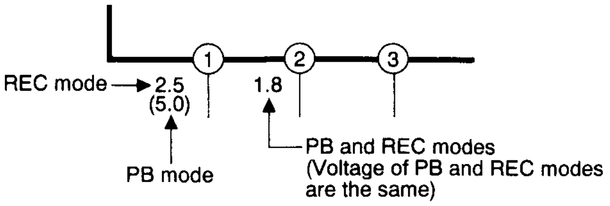
Board to Board



Connected pattern on board

4. Voltage measurement

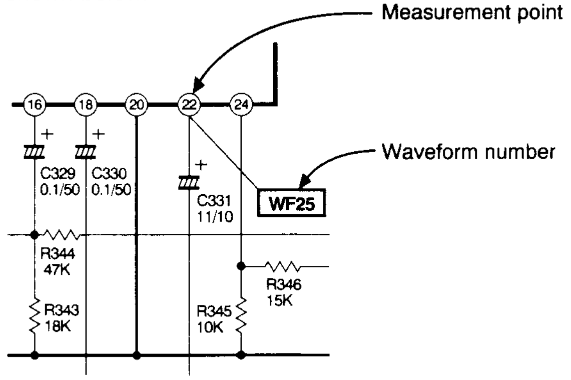
1) Video circuits
   REC : Colour bar signal in SP mode, normal VHS mode.
   PB : Alignment tape, colour bar SP mode, normal VHS mode.
   — : Unmeasurable or unnecessary to measure.
2) Audio circuis
   REC : 1KHz, –8 dBs sine wave signal in SP mode, Normal VHS mode.
   PB : REC then playback it.
3) Movie Camera circuits
   Measured using a correctly illuminated grey scale or colour bar test charts in the E-E mode.
4) Indication on schematic diagram
   Voltage Indications for REC and PB mode on the schematic diagram are as shown below.


①
②
③
REC mode
2.5
(5.0)
1.8
PB mode
PB and REC modes
(Voltage of PB and REC modes are the same)

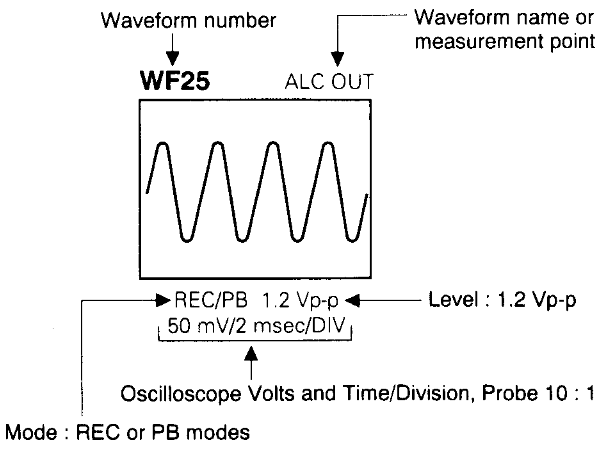
Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

5. Waveform measurement

1) Video circuits
   REC : Colour bar signal in SP mode, normal VHS mode.
   PB : Alignment tape, colour bar SP mode, normal VHS mode.
2) Audio circuits
   REC : 1KHz, –8 dBs sine wave signal in SP mode, normal VHS mode.
   PB : REC then playback it.
3) Movie Camera circuits
   Measured using a correctly illuminated grey scale or colour bar test chatrs in the E-E mode.
4) Indication on schematic diagram
   Waveform indications on the schematic diagram are as shown below.

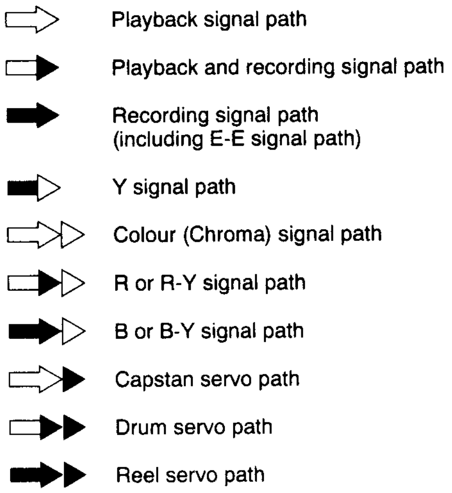

Measurement point
16
18
20
22
24
C329
0.1/50
C330
0.1/50
C331
11/10
Waveform number
WF25
R344
47K
R343
18K
R345
10K
R346
15K

5) Waveform indications


Waveform number
Waveform name or measurement point
WF25
ALC OUT
REC/PB 1.2 Vp-p
Level : 1.2 Vp-p
50 mV/2 msec/DIV
Oscilloscope Volts and Time/Division, Probe 10 : 1
Mode : REC or PB modes

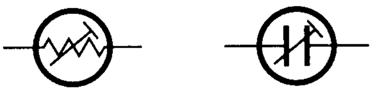
6. Signal path Symbols

The arrows indicate the signal path as follows.


Playback signal path
Playback and recording signal path
Recording signal path
(including E-E signal path)
Y signal path
Colour (Chroma) signal path
R or R-Y signal path
B or B-Y signal path
Capstan servo path
Drum servo path
Reel servo path

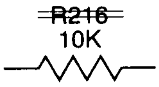
7. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



8. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.
Or the symbol number is struck off by two lines as below.



CIRCUIT BOARD NOTES

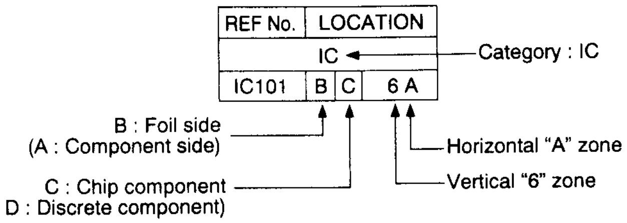
1. Foil and Component sides

1) Foil side (B side) :
Parts on the foil side seen from foil face (pattern face) are indicated.

2) Component side (A side) :
Parts on the component side seen from component face (parts face) indicated.

2. Parts location guides

Parts location are indicated by guide scale on the circuit board.

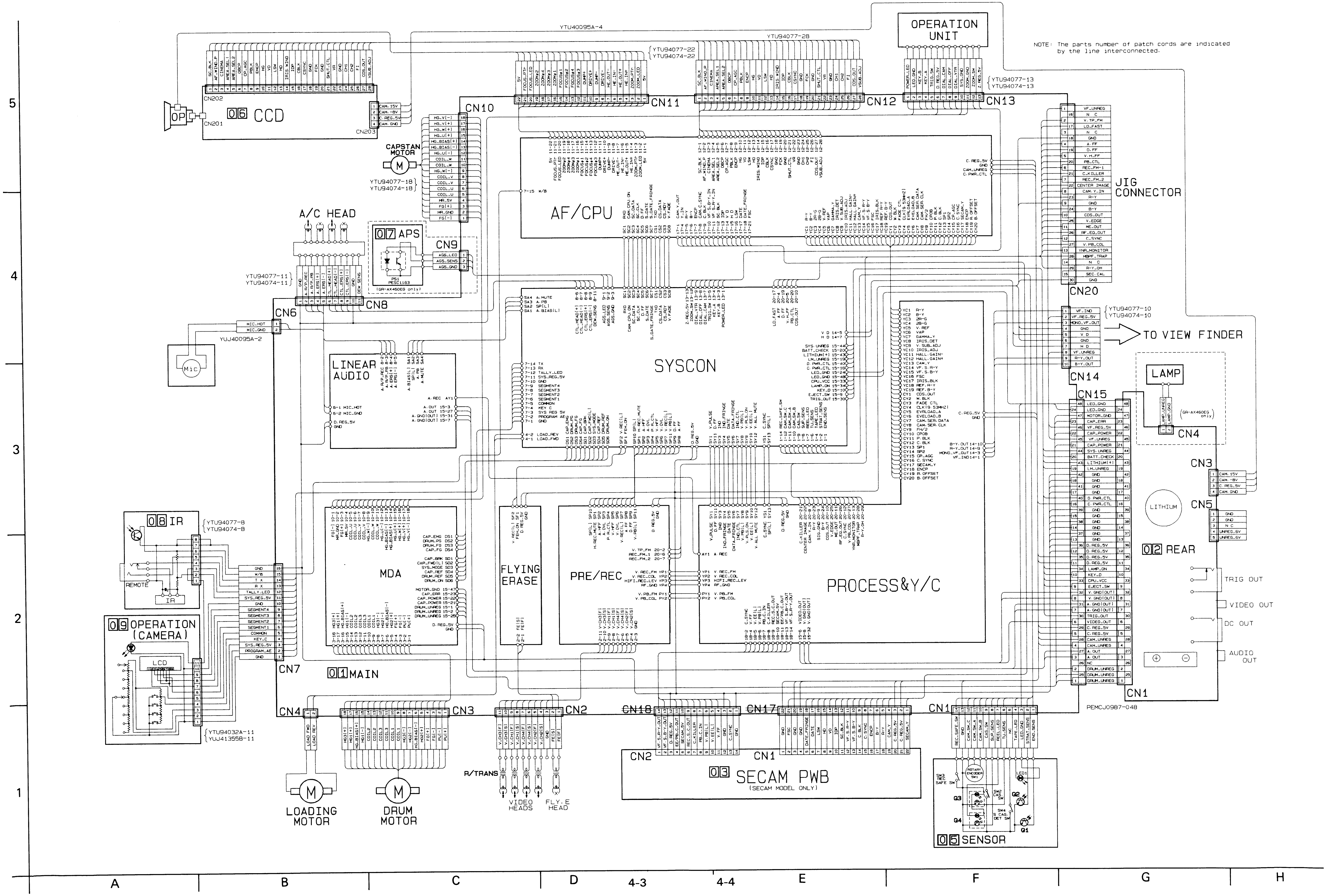

REF No.
LOCATION
IC
Category : IC
IC101
B
C
6 A
B : Foil side
(A : Component side)
C : Chip component
D : Discrete component)
Horizontal "A" zone
Vertical "6" zone

Notes:

1) **For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).**

2) **For repairing SMC (Surface Mounted Components), please refer to the VIDEO SERVICE GUIDE No. VTS81001.**

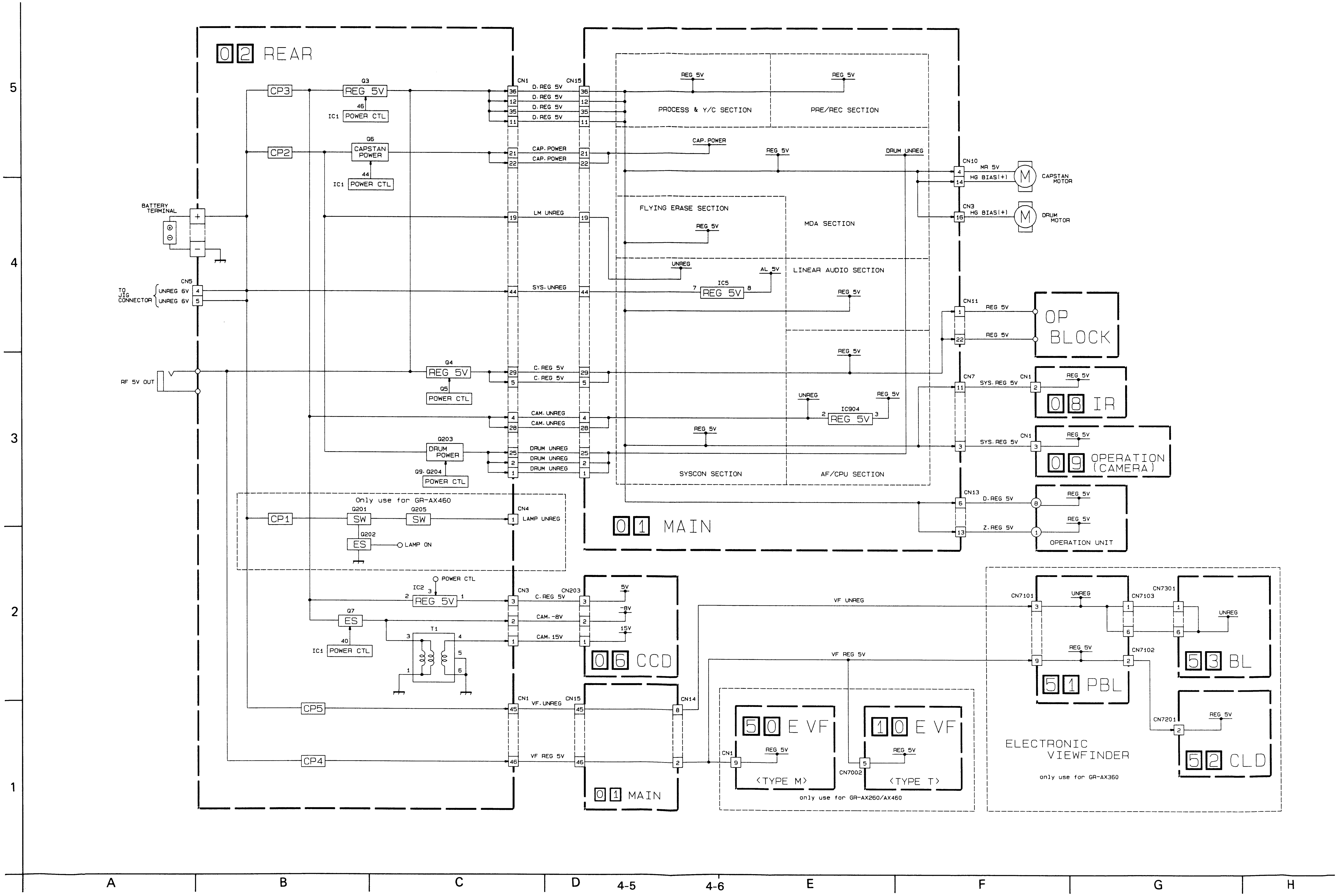
4.1 BOARD INTERCONNECTIONS



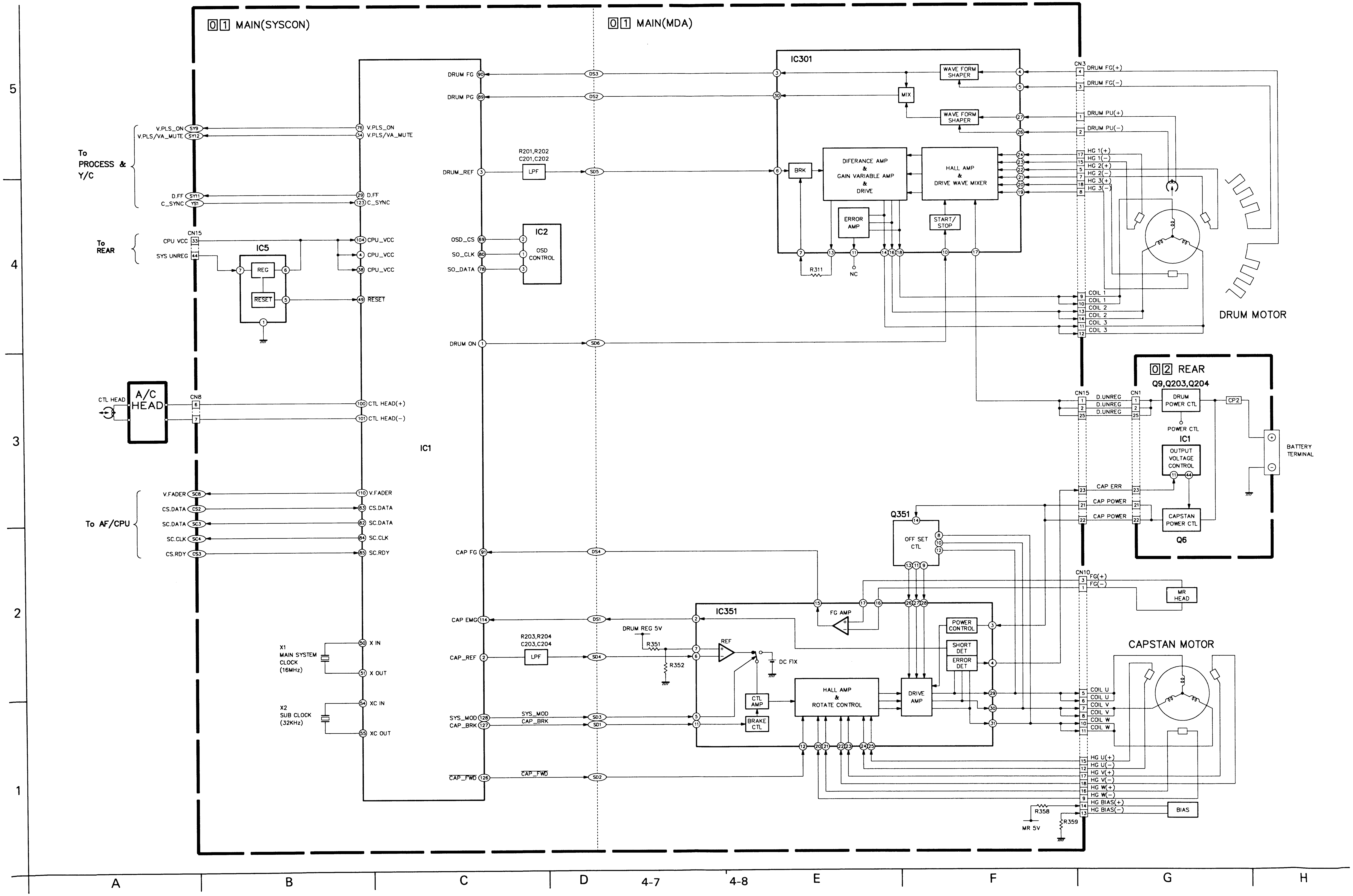
NOTE: The parts number of patch cords are indicated by the line interconnected.

YTU40095A-4
YTU94077-22
YTU94074-22
YTU94077-28
OPERATION UNIT
YTU94077-13
YTU94074-13
06 CCD
CN201
CN202
CN203
OP
CN10
CN11
CN12
CN13
CAPSTAN MOTOR
YTU94077-18
YTU94074-18
AF/CPU
JIG CONNECTOR
CN20
A/C HEAD
07 APS
CN9
PESC1163
(GR-AX460EG only)
YTU94077-11
YTU94074-11
CN6
CN8
YUJ40095A-2
MIC
LINEAR AUDIO
SYSCON
YTU94077-10
YTU94074-10
TO VIEW FINDER
CN14
LAMP
CN15
(GR-AX460EG only)
CN4
CN3
LITHIUM
CN5
02 REAR
TRIG OUT
VIDEO OUT
DC OUT
AUDIO OUT
08 IR
YTU94077-8
YTU94074-8
REMOTE
IR
09 OPERATION (CAMERA)
LCD
MDA
FLYING ERASE
PRE/REC
PROCESS&Y/C
CN7
01 MAIN
CN1
PEMCJ0987-048
YTU94032A-11
YUJ41355B-11
CN4
CN3
CN2
CN18
CN17
CN1
CN2
CN1
03 SECAM PWB
(SECAM MODEL ONLY)
LOADING MOTOR
DRUM MOTOR
R/TRANS
VIDEO HEADS
FLY. E HEAD
ROTARY ENCODER SW1
SW3 REC SAFE SW
SW2 CAS. SW
SW4 S.CAS. DET SW
Q1
Q2
Q3
Q4
LED1
05 SENSOR
1
2
3
4
5
A
B
C
D
E
F
G
H

4.2 POWER SYSTEM BLOCK DIAGRAM

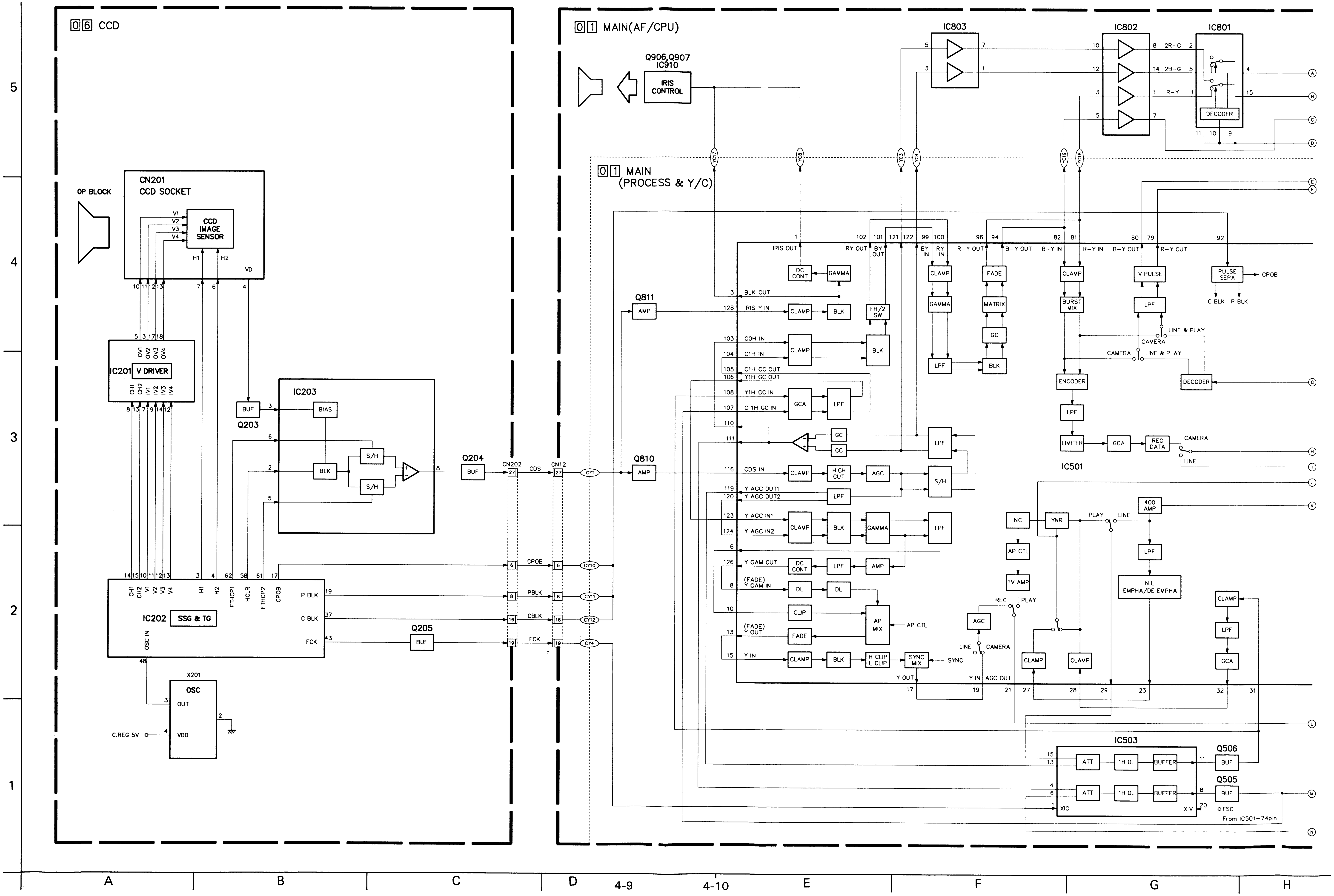

02 REAR
CP3
Q3
REG 5V
46
IC1 POWER CTL
CP2
Q6
CAPSTAN POWER
44
IC1 POWER CTL
BATTERY TERMINAL
+
−
CN5
TO JIG CONNECTOR
UNREG 6V
UNREG 6V
RF 5V OUT
Q4
REG 5V
Q5
POWER CTL
Q203
DRUM POWER
Q9, Q204
POWER CTL
Only use for GR-AX460
CP1
Q201
SW
Q205
SW
Q202
ES
LAMP ON
CN4
LAMP UNREG
IC2
POWER CTL
REG 5V
Q7
ES
40
IC1 POWER CTL
T1
CP5
CP4
CN1
CN15
D. REG 5V
CAP. POWER
LM UNREG
SYS. UNREG
C. REG 5V
CAM. UNREG
DRUM UNREG
CN3
CN203
C. REG 5V
CAM. -8V
CAM. 15V
5V
-8V
15V
06 CCD
VF. UNREG
VF REG 5V
CN14
01 MAIN
PROCESS & Y/C SECTION
PRE/REC SECTION
REG 5V
CAP. POWER
DRUM UNREG
FLYING ERASE SECTION
MDA SECTION
UNREG
AL 5V
IC5
REG 5V
LINEAR AUDIO SECTION
UNREG
IC904
REG 5V
SYSCON SECTION
AF/CPU SECTION
01 MAIN
CN10
MR 5V
HG BIAS(+)
CAPSTAN MOTOR
CN3
HG BIAS(+)
DRUM MOTOR
M
CN11
REG 5V
OP BLOCK
CN7
SYS. REG 5V
08 IR
09 OPERATION (CAMERA)
CN13
D. REG 5V
Z. REG 5V
OPERATION UNIT
VF UNREG
VF REG 5V
CN1
50 E VF
<TYPE M>
CN7002
10 E VF
<TYPE T>
only use for GR-AX260/AX460
CN7101
CN7103
CN7102
CN7301
CN7201
51 PBL
53 BL
52 CLD
ELECTRONIC VIEWFINDER
only use for GR-AX360
A
B
C
D
E
F
G
H
1
2
3
4
5

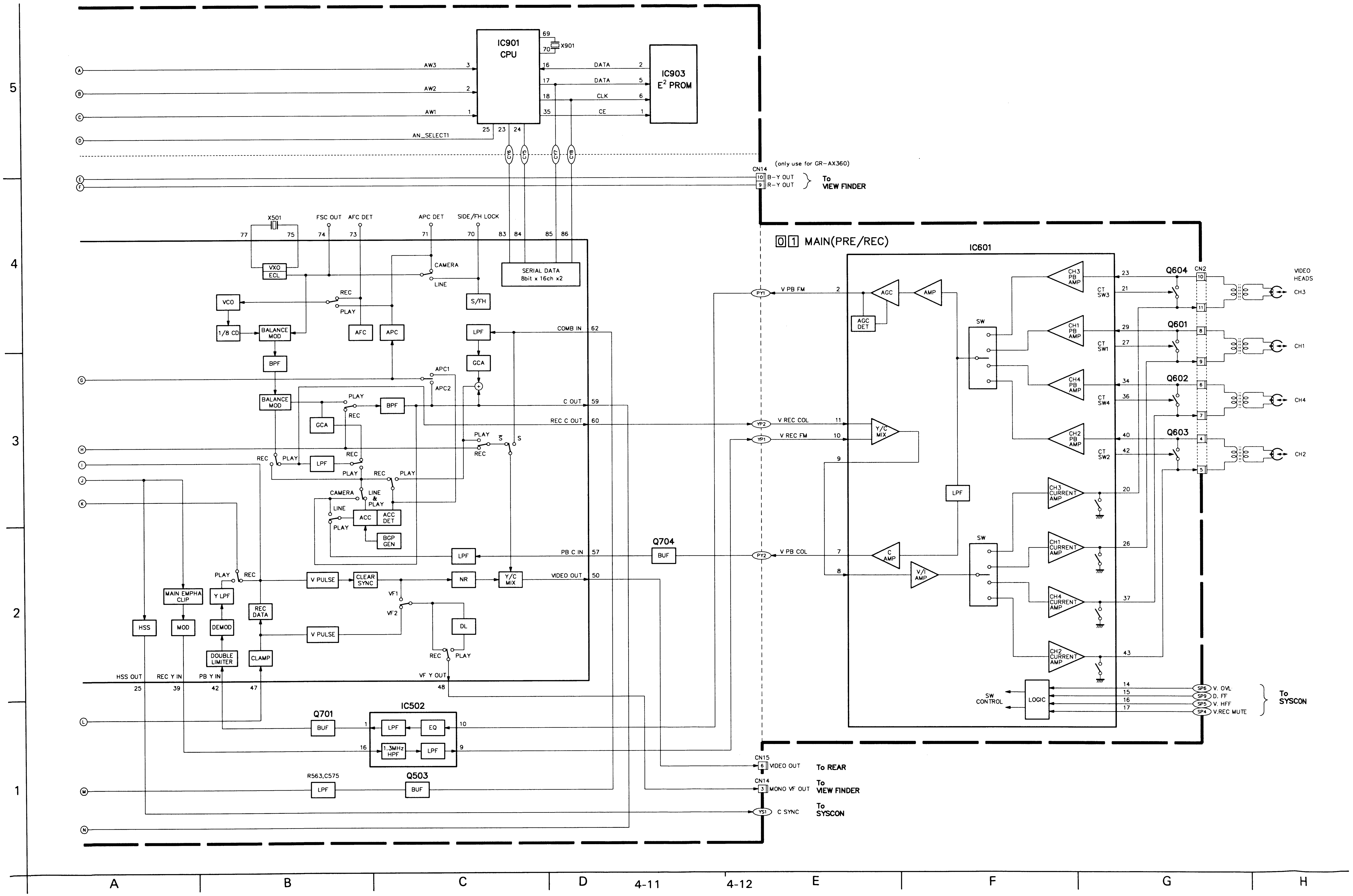
4.3 SYSCON/MDA BLOCK DIAGRAM



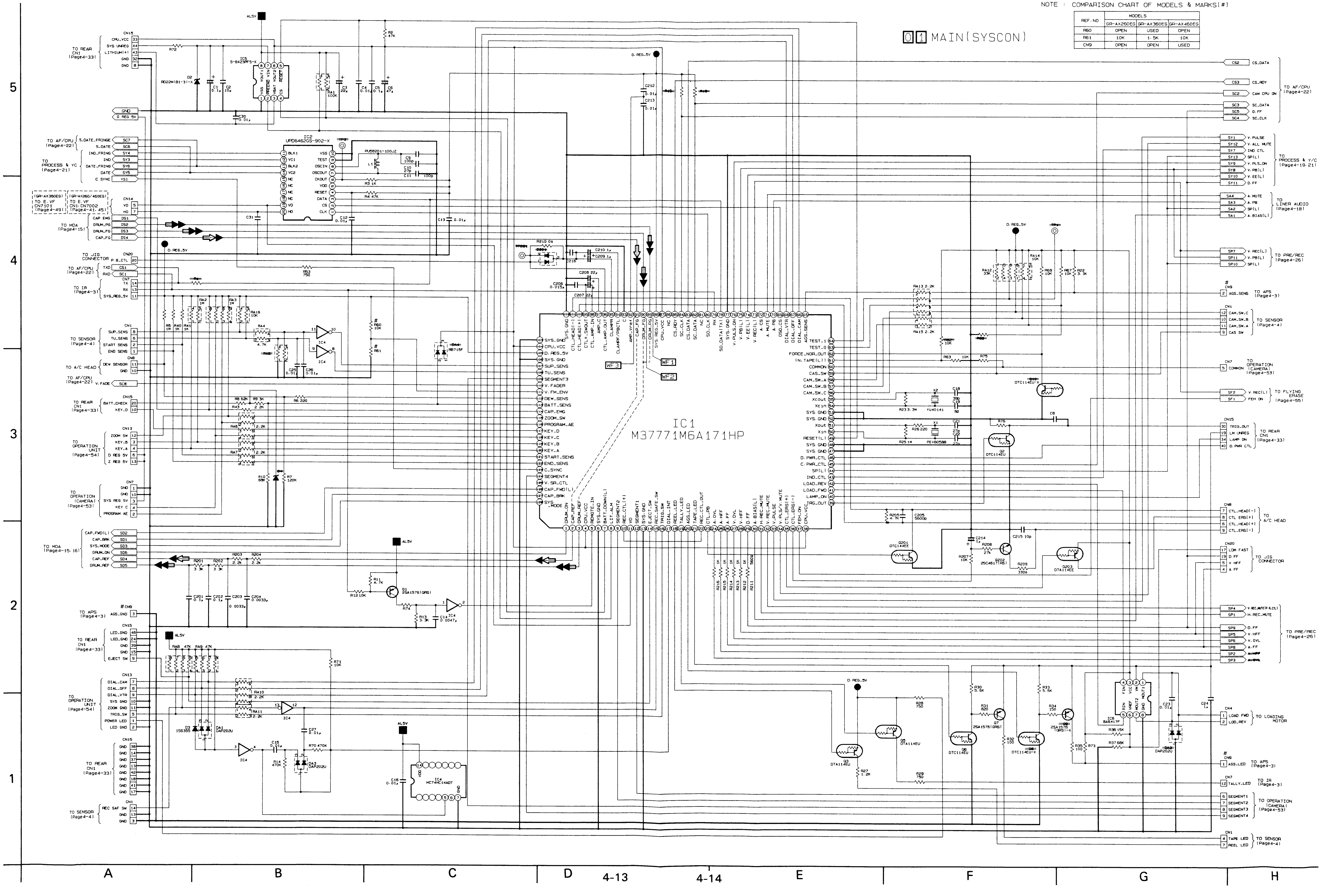
01 MAIN(SYSCON)
01 MAIN(MDA)
02 REAR
IC1
IC2
OSD CONTROL
IC5
REG
RESET
IC301
IC351
Q351
OFF SET CTL
Q9,Q203,Q204
DRUM POWER CTL
POWER CTL
IC1
OUTPUT VOLTAGE CONTROL
CAPSTAN POWER CTL
Q6
BATTERY TERMINAL
To PROCESS & Y/C
To REAR
To AF/CPU
V.PLS_ON
V.PLS/VA_MUTE
D.FF
C_SYNC
CN15
CPU VCC
SYS UNREG
CPU_VCC
RESET
A/C HEAD
CTL HEAD
CN8
CTL HEAD(+)
CTL HEAD(−)
V.FADER
CS.DATA
SC.DATA
SC.CLK
CS.RDY
X1 MAIN SYSTEM CLOCK (16MHz)
X IN
X OUT
X2 SUB CLOCK (32KHz)
XC IN
XC OUT
DRUM FG
DRUM PG
DRUM_REF
R201,R202 C201,C202
LPF
OSD_CS
SO_CLK
SO_DATA
DRUM ON
CAP FG
CAP EMG
CAP_REF
R203,R204 C203,C204
SYS_MOD
CAP_BRK
CAP_FWD
WAVE FORM SHAPER
MIX
BRK
DIFERANCE AMP & GAIN VARIABLE AMP & DRIVE
HALL AMP & DRIVE WAVE MIXER
ERROR AMP
START/STOP
R311
NC
CN3
DRUM FG(+)
DRUM FG(−)
DRUM PU(+)
DRUM PU(−)
HG 1(+)
HG 1(−)
HG 2(+)
HG 2(−)
HG 3(+)
HG 3(−)
COIL 1
COIL 2
COIL 3
DRUM MOTOR
CN15
CN1
D.UNREG
CP2
CAP ERR
CAP POWER
CN10
FG(+)
FG(−)
MR HEAD
FG AMP
POWER CONTROL
SHORT DET
ERROR DET
DRUM REG 5V
R351
R352
REF
DC FIX
CTL AMP
BRAKE CTL
HALL AMP & ROTATE CONTROL
DRIVE AMP
CAPSTAN MOTOR
COIL U
COIL V
COIL W
HG U(+)
HG U(−)
HG V(+)
HG V(−)
HG W(+)
HG W(−)
HG BIAS(+)
HG BIAS(−)
BIAS
R358
R359
MR 5V
A
B
C
D
E
F
G
H
1
2
3
4
5

4.4 Y/C AND PROCESS BLOCK DIAGRAM


06 CCD
OP BLOCK
CN201
CCD SOCKET
CCD IMAGE SENSOR
V1
V2
V3
V4
H1
H2
VD
IC201 V DRIVER
OV1 OV2 OV3 OV4
CH1 CH2 IV1 IV2 IV3 IV4
BUF
Q203
IC203
BIAS
BLK
S/H
Q204
BUF
IC202 SSG & TG
CH1 CH2 V1 V2 V3 V4 H1 H2 FTHCP1 HCLR FTHCP2 CPOB
P BLK
C BLK
FCK
OSC IN
Q205
BUF
X201
OSC
OUT
VDD
C.REG 5V
CN202
CN12
CDS
CPOB
PBLK
CBLK
FCK
CY1
CY10
CY11
CY12
CY4
01 MAIN(AF/CPU)
Q906,Q907 IC910
IRIS CONTROL
IC803
IC802
IC801
DECODER
2R-G
2B-G
R-Y
YC17
YC8
YC3
YC4
YC19
YC18
01 MAIN (PROCESS & Y/C)
Q811
AMP
Q810
AMP
IRIS OUT
RY OUT
BY OUT
BY IN
RY IN
R-Y OUT
B-Y OUT
B-Y IN
R-Y IN
DC CONT
GAMMA
BLK OUT
IRIS Y IN
CLAMP
BLK
FH/2 SW
COH IN
C1H IN
C1H GC OUT
Y1H GC OUT
Y1H GC IN
C 1H GC IN
GCA
LPF
GC
CDS IN
HIGH CUT
AGC
S/H
Y AGC OUT1
Y AGC OUT2
Y AGC IN1
Y AGC IN2
Y GAM OUT
(FADE) Y GAM IN
DL
CLIP
AP MIX
AP CTL
(FADE) Y OUT
FADE
Y IN
H CLIP L CLIP
SYNC MIX
SYNC
Y OUT
Y IN
AGC OUT
MATRIX
BURST MIX
V PULSE
PULSE SEPA
CPOB
C BLK
P BLK
LINE & PLAY
CAMERA
ENCODER
DECODER
LIMITER
REC DATA
LINE
IC501
NC
YNR
PLAY
400 AMP
AP CTL
1V AMP
REC
N.L EMPHA/DE EMPHA
IC503
ATT
1H DL
BUFFER
XIC
XIV
Q506
BUF
Q505
FSC
From IC501-74pin
A B C D E F G H
1 2 3 4 5


IC901
CPU
IC903
E² PROM
X901
AW3
AW2
AW1
AN_SELECT1
DATA
DATA
CLK
CE
CN14
(only use for GR-AX360)
B-Y OUT
R-Y OUT
To
VIEW FINDER
X501
FSC OUT
AFC DET
APC DET
SIDE/FH LOCK
VXO
ECL
SERIAL DATA
8bit x 16ch x2
CAMERA
LINE
REC
PLAY
VCO
1/8 CD
BALANCE
MOD
AFC
APC
S/FH
LPF
GCA
BPF
COMB IN
APC1
APC2
C OUT
REC C OUT
ACC
ACC
DET
BGP
GEN
LINE
&
PLAY
PB C IN
Q704
BUF
VIDEO OUT
MAIN EMPHA
CLIP
Y LPF
V PULSE
CLEAR
SYNC
NR
Y/C
MIX
VF1
VF2
DL
REC
DATA
HSS
MOD
DEMOD
DOUBLE
LIMITER
CLAMP
HSS OUT
REC Y IN
PB Y IN
VF Y OUT
Q701
IC502
EQ
1.3MHz
HPF
R563,C575
Q503
CN15
VIDEO OUT
To REAR
MONO VF OUT
To
VIEW FINDER
C SYNC
To
SYSCON
01 MAIN(PRE/REC)
IC601
V PB FM
AGC
AMP
AGC
DET
V REC COL
V REC FM
Y/C
MIX
V PB COL
C
AMP
V/I
AMP
SW
CH3
PB
AMP
CH1
PB
AMP
CH4
PB
AMP
CH2
PB
AMP
CT
SW3
CT
SW1
CT
SW4
CT
SW2
CH3
CURRENT
AMP
CH1
CURRENT
AMP
CH4
CURRENT
AMP
CH2
CURRENT
AMP
Q604
Q601
Q602
Q603
CN2
VIDEO
HEADS
CH3
CH1
CH4
CH2
SW
CONTROL
LOGIC
V. OVL
D. FF
V. HFF
V.REC MUTE
To
SYSCON
PY1
YP2
YP1
PY2
YS1
SP6
SP9
SP5
SP4
CY6
CY5
CY7
CY8
A
B
C
D
E
F
G
H
1
2
3
4
5

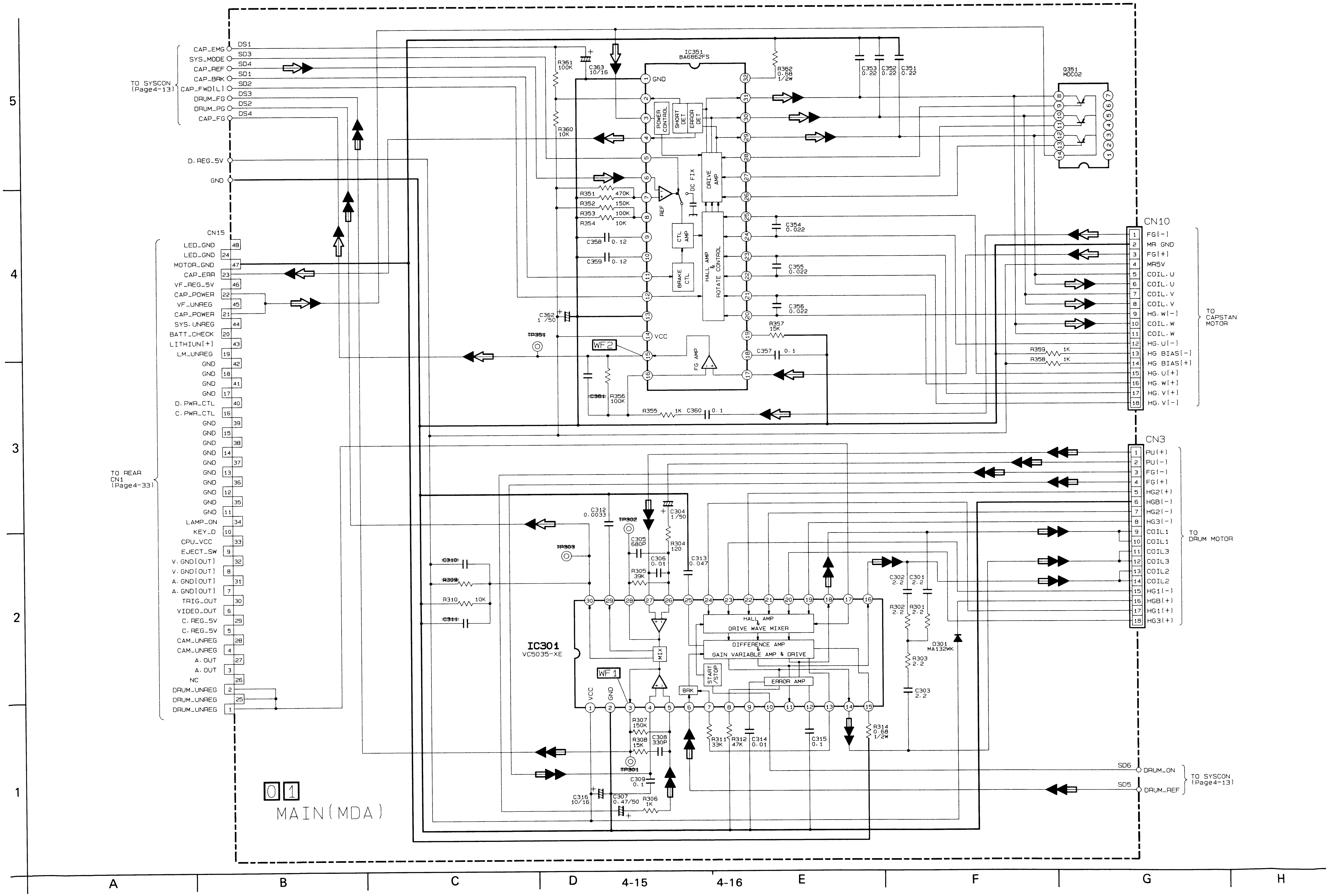
4.5 SYSCON SCHEMATIC DIAGRAM


01 MAIN(SYSCON)
IC1
M37771M6A171HP
IC2
UPD6462GS-902-X
IC5
S-8425PFS-X
IC4
MC74HC14ADT
IC6
BA6417F
X1
X2
WF1
WF2
WF3
D.REG.5V
AL5V
TO REAR CN1 (Page4-33)
TO AF/CPU (Page4-22)
TO PROCESS & Y/C (Page4-21)
TO E.VF CN7101 (Page4-49)
TO E.VF CN1-CN7002 (Page4-41, 45)
TO MDA (Page4-15)
TO JIG CONNECTOR
TO IR (Page4-3)
TO SENSOR (Page4-4)
TO A/C HEAD
TO OPERATION UNIT (Page4-54)
TO OPERATION (CAMERA) (Page4-53)
TO MDA (Page4-15, 16)
TO APS (Page4-3)
TO AF/CPU (Page4-22)
TO PROCESS & Y/C (Page4-19, 21)
TO LINER AUDIO (Page4-18)
TO PRE/REC (Page4-26)
TO FLYING ERASE (Page4-55)
TO LOADING MOTOR
1
2
3
4
5
A
B
C
D
E
F
G
H

NOTE : COMPARISON CHART OF MODELS & MARKS(#)

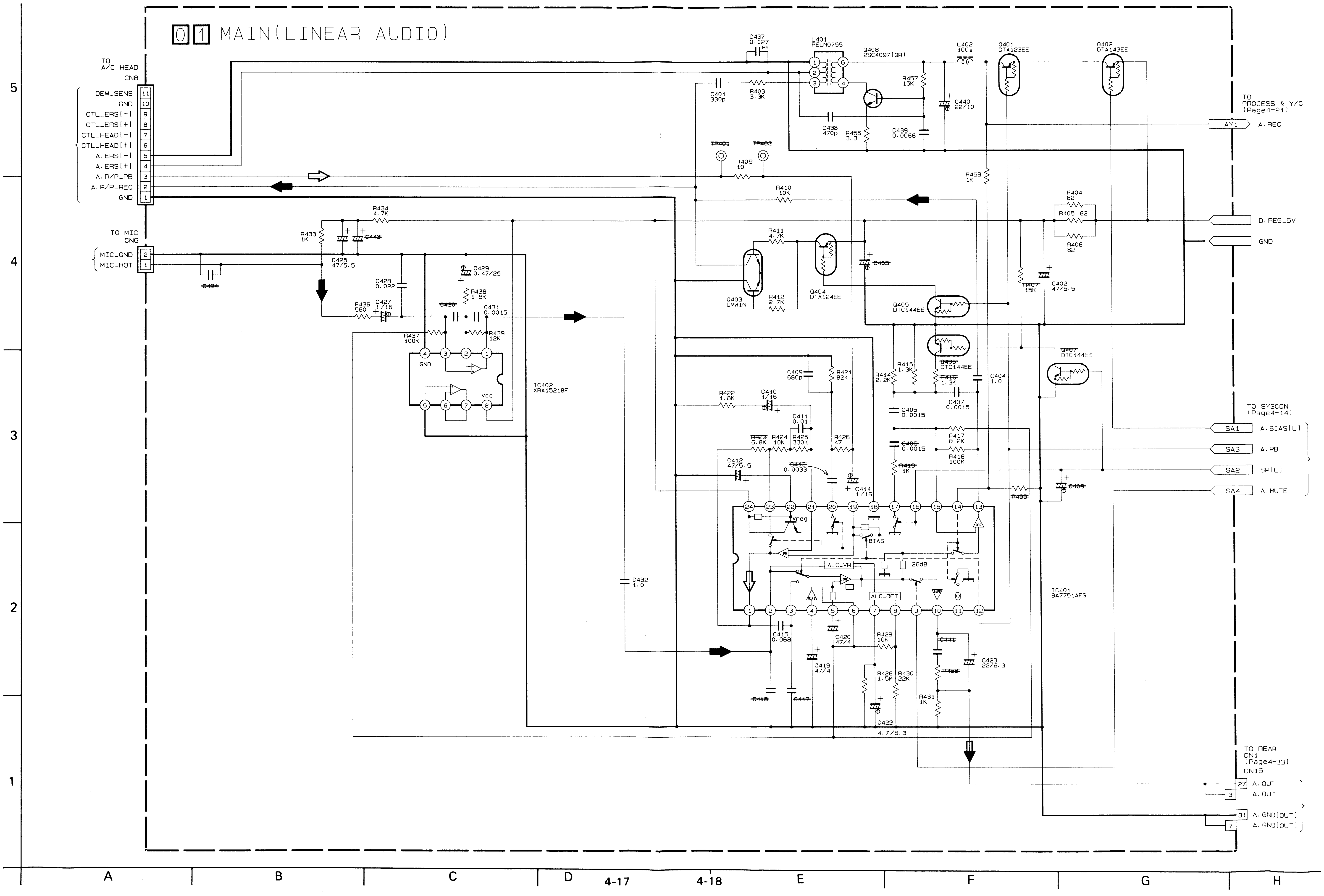
REF.NO	MODELS		
	GR-AX260EG	GR-AX360EG	GR-AX460EG
R60	OPEN	USED	OPEN
R61	10K	1.5K	10K
CN9	OPEN	OPEN	USED

4.6 MDA SCHEMATIC DIAGRAM



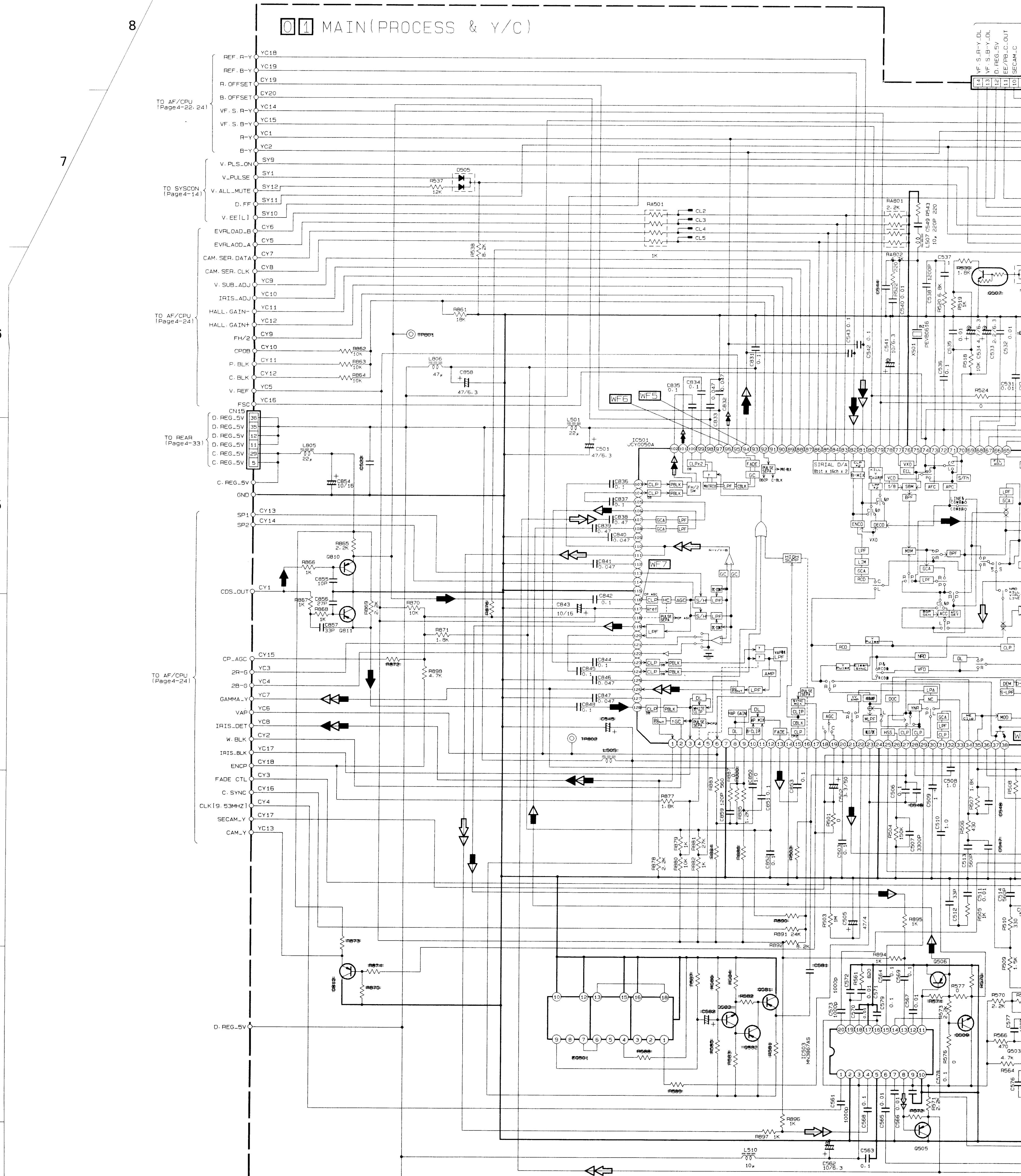
TO SYSCON (Page4-13)
CAP_EMG DS1
SYS_MODE SD3
CAP_REF SD4
CAP_BRK SD1
CAP_FWD(L) SD2
DRUM_FG DS3
DRUM_PG DS2
CAP_FG DS4
D.REG_5V
GND
CN15
TO REAR CN1 (Page4-33)
LED_GND 48
LED_GND 24
MOTOR_GND 47
CAP_ERR 23
VF_REG_5V 46
CAP_POWER 22
VF_UNREG 45
CAP_POWER 21
SYS.UNREG 44
BATT_CHECK 20
LITHIUN(+) 43
LM_UNREG 19
GND 42
GND 18
GND 41
GND 17
D.PWR_CTL 40
C.PWR_CTL 16
GND 39
GND 15
GND 38
GND 14
GND 37
GND 13
GND 36
GND 12
GND 35
GND 11
LAMP_ON 34
KEY_D 10
CPU_VCC 33
EJECT_SW 9
V.GND(OUT) 32
V.GND(OUT) 8
A.GND(OUT) 31
A.GND(OUT) 7
TRIG_OUT 30
VIDEO_OUT 6
C.REG_5V 29
C.REG_5V 5
CAM_UNREG 28
CAM_UNREG 4
A.OUT 27
A.OUT 3
NC 26
DRUM_UNREG 2
DRUM_UNREG 25
DRUM_UNREG 1
IC351 BA6862FS
GND
VCC
POWER CONTROL
SHORT DET
ERROR DET
DRIVE AMP
DC FIX
REF
CTL AMP
BRAKE CTL
HALL AMP & ROTATE CONTROL
FG AMP
R361 100K
C363 10/16
R360 10K
R351 470K
R352 150K
R353 100K
R354 10K
C358 0.12
C359 0.12
C362 1/50
TP351
WF2
C361
R356 100K
R355 1K
C360 0.1
R362 0.68 1/2W
C353 0.22
C352 0.22
C351 0.22
C354 0.022
C355 0.022
C356 0.022
R357 15K
C357 0.1
Q351 MDC02
R359 1K
R358 1K
CN10
FG(-)
MR GND
FG(+)
MR5V
COIL.U
COIL.U
COIL.V
COIL.V
HG.W(-)
COIL.W
COIL.W
HG.U(-)
HG BIAS(-)
HG BIAS(+)
HG.U(+)
HG.W(+)
HG.V(+)
HG.V(-)
TO CAPSTAN MOTOR
CN3
PU(+)
PU(-)
FG(-)
FG(+)
HG2(+)
HGB(-)
HG2(-)
HG3(-)
COIL1
COIL1
COIL3
COIL3
COIL2
COIL2
HG1(-)
HGB(+)
HG1(+)
HG3(+)
TO DRUM MOTOR
IC301 VC5035-XE
VCC
GND
HALL AMP & DRIVE WAVE MIXER
DIFFERENCE AMP & GAIN VARIABLE AMP & DRIVE
START/STOP
BRK
ERROR AMP
MIX
WF1
C312 0.0033
TP302
C305 680P
C304 1/50
R304 120
C306 0.01
R305 39K
C313 0.047
TP303
C310
R309
R310 10K
C311
R307 150K
R308 15K
C308 330P
TP301
C309 0.1
C316 10/16
C307 0.47/50
R306 1K
R311 33K
R312 47K
C314 0.01
C315 0.1
R314 0.68 1/2W
C302 2.2
C301 2.2
R302 2.2
R301 2.2
D301 MA132WK
R303 2.2
C303 2.2
SD6 DRUM_ON
SD5 DRUM_REF
TO SYSCON (Page4-13)
01
MAIN(MDA)
1
2
3
4
5
A
B
C
D
E
F
G
H

4.7 LINEAR AUDIO SCHEMATIC DIAGRAM



01 MAIN(LINEAR AUDIO)
TO A/C HEAD CN8
DEW_SENS 11
GND 10
CTL_ERS(-) 9
CTL_ERS(+) 8
CTL_HEAD(-) 7
CTL_HEAD(+) 6
A.ERS(-) 5
A.ERS(+) 4
A.R/P_PB 3
A.R/P_REC 2
GND 1
TO MIC CN6
MIC_GND 2
MIC_HOT 1
C424
R433 1K
C425 47/5.5
C443
R434 4.7K
C428 0.022
C429 0.47/25
R438 1.8K
R436 560
C427 1/16
C430
C431 0.0015
R437 100K
R439 12K
GND
Vcc
IC402 XRA15218F
C432 1.0
C437 0.027
L401 PELN0755
Q408 2SC4097(QR)
C401 330p
R403 3.3K
C438 470p
R456 3.3
R457 15K
C439 0.0068
C440 22/10
L402 100µ
Q401 DTA123EE
Q402 DTA143EE
TP401
TP402
R409 10
R410 10K
R459 1K
R404 82
R405 82
R406 82
R411 4.7K
R412 2.7K
Q403 UMW1N
Q404 DTA124EE
C403
Q405 DTC144EE
R407 15K
C402 47/5.5
Q406 DTC144EE
Q407 DTC144EE
R414 2.2K
R415 1.3K
R416 1.3K
C404 1.0
C407 0.0015
C409 680p
R421 82K
R422 1.8K
C410 1/16
C411 0.01
R423 6.8K
R424 10K
R425 330K
R426 47
C412 47/5.5
C413 0.0033
C414 1/16
C405 0.0015
C406 0.0015
R417 8.2K
R418 100K
R419 1K
R455
C408
Vreg
BIAS
ALC_VR
ALC_DET
-26dB
IC401 BA7751AFS
C415 0.068
C418
C417
C419 47/4
C420 47/4
R429 10K
R428 1.5M
R430 22K
C422 4.7/6.3
C441
R458
R431 1K
C423 22/6.3
TO PROCESS & Y/C (Page4-21)
AY1 A.REC
D.REG_5V
GND
TO SYSCON (Page4-14)
SA1 A.BIAS(L)
SA3 A.PB
SA2 SP(L)
SA4 A.MUTE
TO REAR CN1 (Page4-33) CN15
27 A.OUT
3 A.OUT
31 A.GND(OUT)
7 A.GND(OUT)
1
2
3
4
5
A
B
C
D
E
F
G
H

4.8 PROCESS AND Y/C SCHEMATIC DIAGRAM

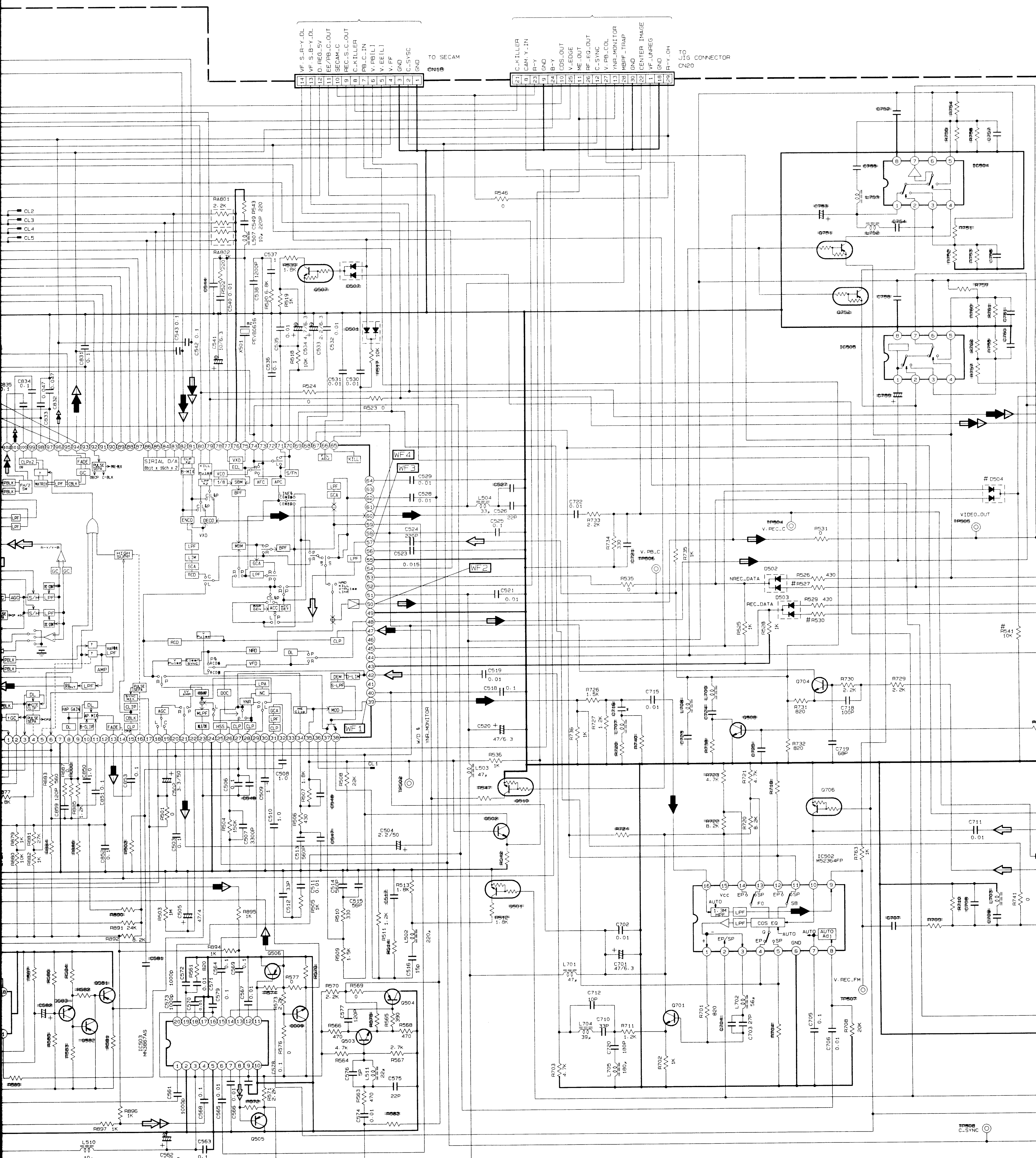


01 MAIN(PROCESS & Y/C)
TO AF/CPU (Page4-22, 24)
REF. R-Y
REF. B-Y
R. OFFSET
B. OFFSET
VF. S. R-Y
VF. S. B-Y
R-Y
B-Y
TO SYSCON (Page4-14)
V. PLS_ON
V_PULSE
V. ALL_MUTE
D. FF
V. EE(L)
EVRLOAD_B
EVRLAOD_A
CAM. SER. DATA
CAM. SER. CLK
V. SUB_ADJ
IRIS_ADJ
HALL. GAIN-
HALL. GAIN+
TO AF/CPU (Page4-24)
FH/2
CPOB
P. BLK
C. BLK
V. REF
FSC
CN15
TO REAR (Page4-33)
D. REG_5V
C. REG_5V
GND
SP1
SP2
CDS_OUT
TO AF/CPU (Page4-24)
CP_AGC
2R-G
2B-G
GAMMA_Y
VAP
IRIS_DET
W. BLK
IRIS_BLK
ENCP
FADE CTL
C. SYNC
CLK(9.53MHZ)
SECAM_Y
CAM_Y
D. REG_5V
IC501 JCY0050A
IC503 MN3867AS
WF5
WF6
WF7
VF S.R-Y_OL
VF S.B-Y_OL
D.REG.5V
EE/PB_C.OUT
SECAM_C

NOTES : 1. Unless otherwise specified.
All NPN type transistors are 2SC4617(QRS). All NPN type digital transistors are DTC144EE.
All PNP type transistors are 2SA1774(QRS). All PNP type digital transistors are DTA144EE.
All diodes are DAN222.

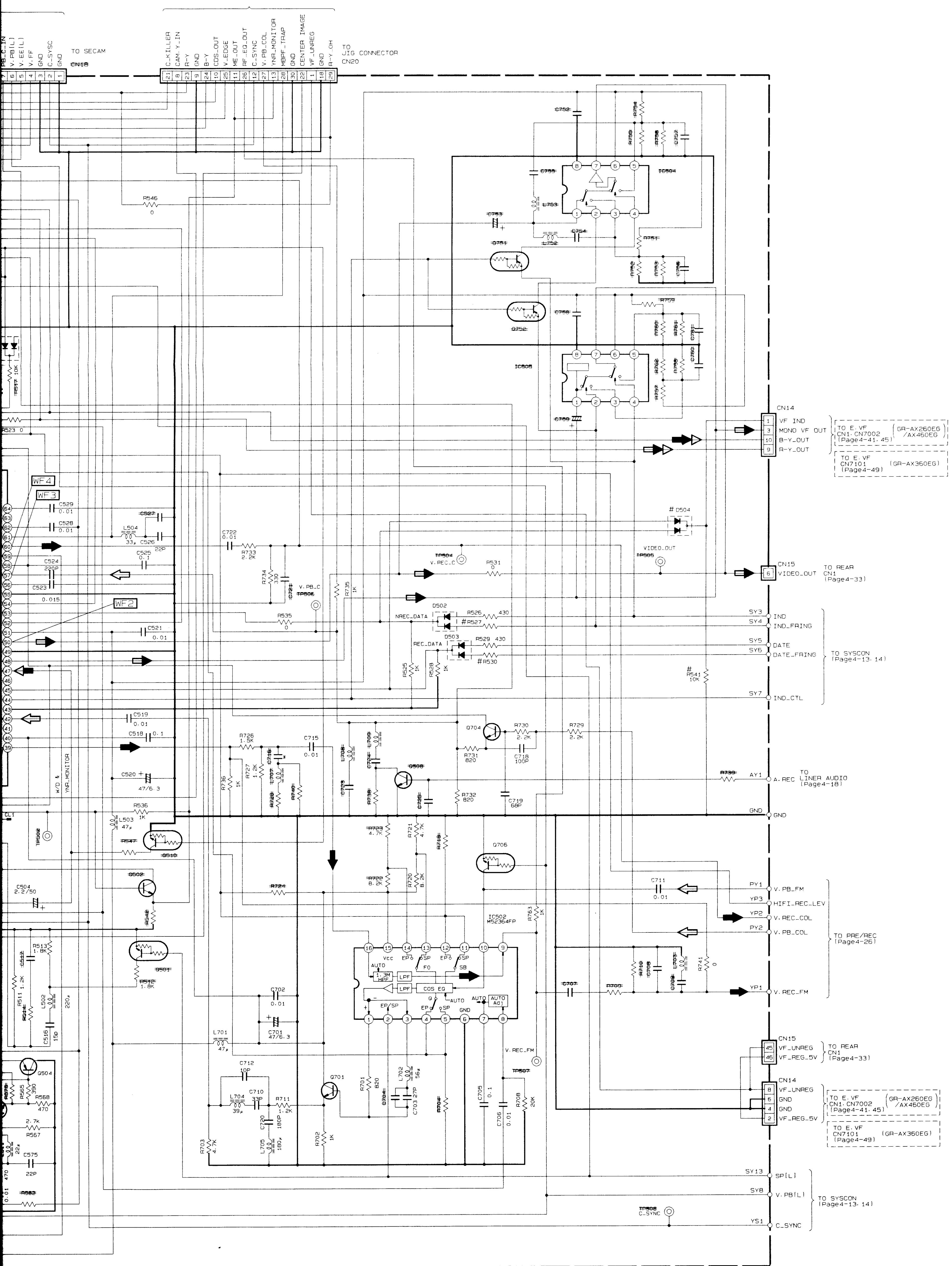
2. COMPARISON CHART OF MODELS & MARKS(#)

REF. NO	MODELS	
	GR-AX260 /360EG	GR-AX460EG
D504	OPEN	USED
R527	1K	820
R530	1K	820
R541	OPEN	USED


VF_S.R-Y_DL
VF_S.B-Y_DL
D.REG_5V
EE/PB_C_OUT
SECAM_C
REC_S.C_OUT
C_KILLER
PB_C_IN
V.PB(L)
V.EE(L)
V.FF
GND
C_SYSC
GND
TO SECAM
~~CN18~~
C.KILLER
CAM Y.IN
R-Y
GND
B-Y
CDS_OUT
ME_OUT
RF_EQ_OUT
C_SYNC
V.PB_COL
YNR_MONITOR
MBPF_TRAP
GND
CENTER IMAGE
VF_UNREG
GND
R-Y_OH
TO
JIG CONNECTOR
CN20
CL2
CL3
CL4
CL5
WF4
WF3
WF2
WF1
SIRIAL D/A
8bit x 16ch x 2
IC504
IC505
IC502
M52364FP
IC503
MN3867AS
VIDEO_OUT
V.REC_C
V.PB_C
NREC_DATA
REC_DATA
V.REC_FM
C_SYNC
D504
D502
D503
Q704
Q701
Q705
Q510
Q502
Q501
Q503
Q504
Q505
Q506
W/D &
YNR_MONITOR

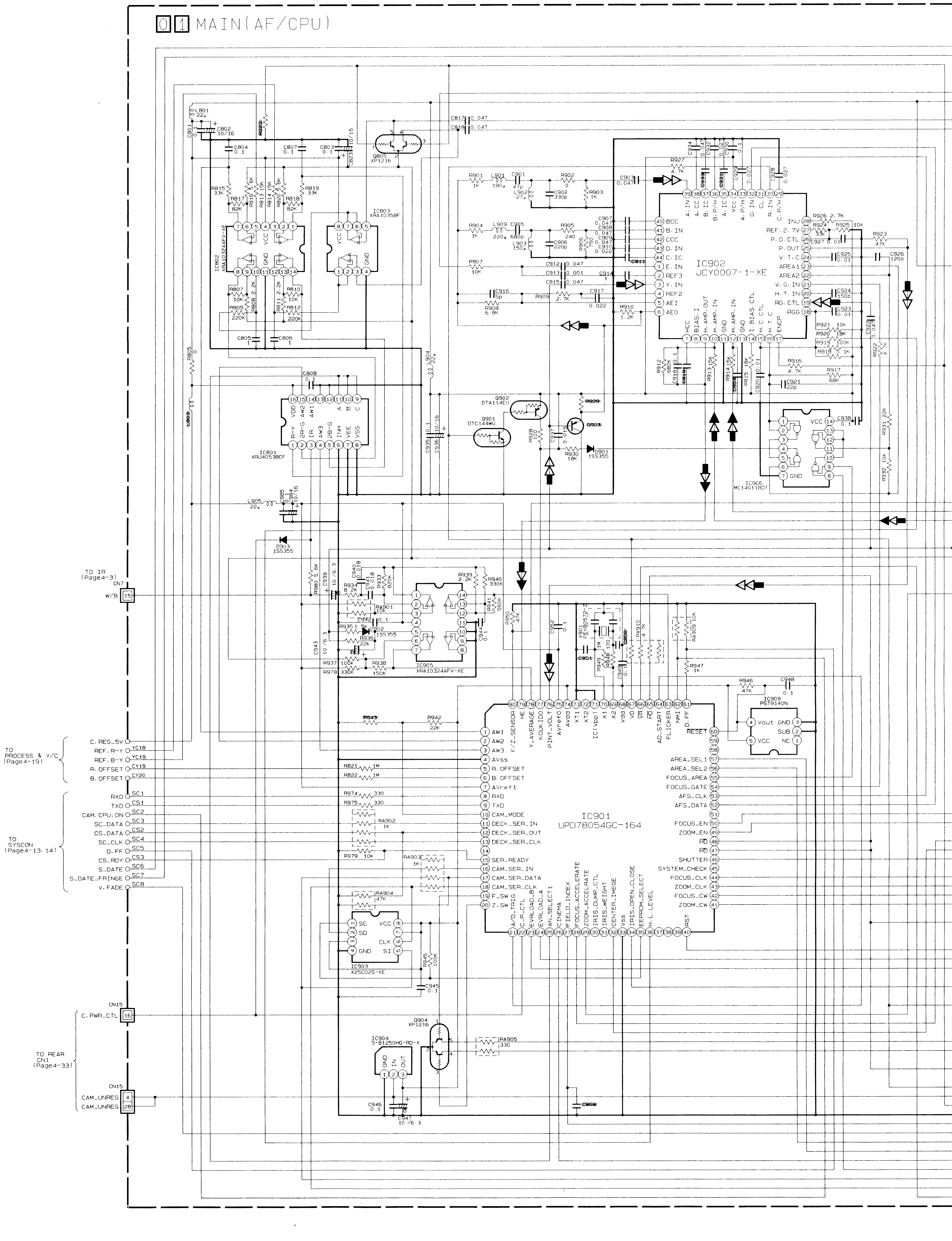
tal transistors are DTC144EE.
tal transistors are DTA144EE.

REF.NO	MODELS	
	GR-AX260 /360EG	GR-AX460EG
D504	OPEN	USED
R527	1K	820
R530	1K	820
R541	OPEN	USED



TO SECAM
CN18
TO JIG CONNECTOR CN20
C_KILLER
CAM_Y_IN
R-Y
GND
B-Y
COS_OUT
V_EDGE
ME_OUT
RF_EQ_OUT
C_SYNC
V_PB_COL
YNR_MONITOR
MBPF_TRAP
GND
CENTER IMAGE
VF_UNREG
GND
R-Y_OH
V.FF
V.EE(L)
V.PB(L)
PB_C_IN
C_SYSC
IC804
IC805
Q751
Q752
L752
L753
CN14
VF IND
MONO VF OUT
B-Y_OUT
R-Y_OUT
TO E.VF CN1.CN7002 (Page4-41.45) (GR-AX260EG /AX460EG)
TO E.VF CN7101 (Page4-49) (GR-AX350EG)
# D504
VIDEO_OUT
TP505
CN15
VIDEO_OUT
TO REAR CN1 (Page4-33)
WF4
WF3
WF2
C529 0.01
C528 0.01
L504 33μ
C526 22P
C722 0.01
R733 2.2K
R734 330
C525 0.1
C524 220P
C523 0.015
V.PB_C
TP506
TP504
V.REC_C
R531 0
R735 1K
D502
NREC_DATA
R526 430
#R527
R535 0
REC_DATA
D503
R529 430
#R530
C521 0.01
R525 1K
R528 1K
SY3 IND
SY4 IND_FRING
SY5 DATE
SY6 DATE_FRING
TO SYSCON (Page4-13.14)
# R541 10K
SY7 IND_CTL
C519 0.01
C518 0.1
R726 1.5K
C715 0.01
Q704
R730 2.2K
R729 2.2K
R731 820
C718 100P
Q508
R732 820
C719 68P
R739
AY1 A.REC
TO LINER AUDIO (Page4-18)
C520 47/6.3
R736 1K
R727 1.2K
W/D & YNR_MONITOR
GND
L503 47μ
R536 1K
TP502
Q510
R547
R723 4.7K
R721 4.7K
R718
Q706
C504 2.2/50
Q502
R722 8.2K
R720 8.2K
R724
C711 0.01
PY1 V.PB_FM
YP3 HIFI_REC_LEV
YP2 V.REC_COL
PY2 V.PB_COL
TO PRE/REC (Page4-26)
IC502 M52364FP
R763 1K
VCC
AUTO
1.3M HPF
LPF
COS EQ
EP/SP
AUTO AGC
R513 1.8K
Q501
R512 1.8K
R511 1.2K
L502 220μ
C516 15p
C702 0.01
C701 47/6.3
C707
R709
R741 0
YP1 V.REC_FM
L701 47μ
V.REC_FM
CN15
VF_UNREG
VF_REG_5V
TO REAR CN1 (Page4-33)
Q504
R565 390
R568 470
C712 10P
L704 39μ
C710 33P
R711 1.2K
Q701
R701 820
L702 56μ
C703 27P
C705 0.1
R708 20K
TP507
CN14
VF_UNREG
GND
GND
VF_REG_5V
TO E.VF CN1.CN7002 (Page4-41.45) (GR-AX260EG /AX460EG)
TO E.VF CN7101 (Page4-49) (GR-AX350EG)
R567 2.7K
C575 22P
R703 4.7K
L705 180μ
C720
R702 1K
C706 0.01
SY13 SP(L)
SY8 V.PB(L)
TO SYSCON (Page4-13.14)
TP508 C_SYNC
YS1 C_SYNC
G
H
I
J
K

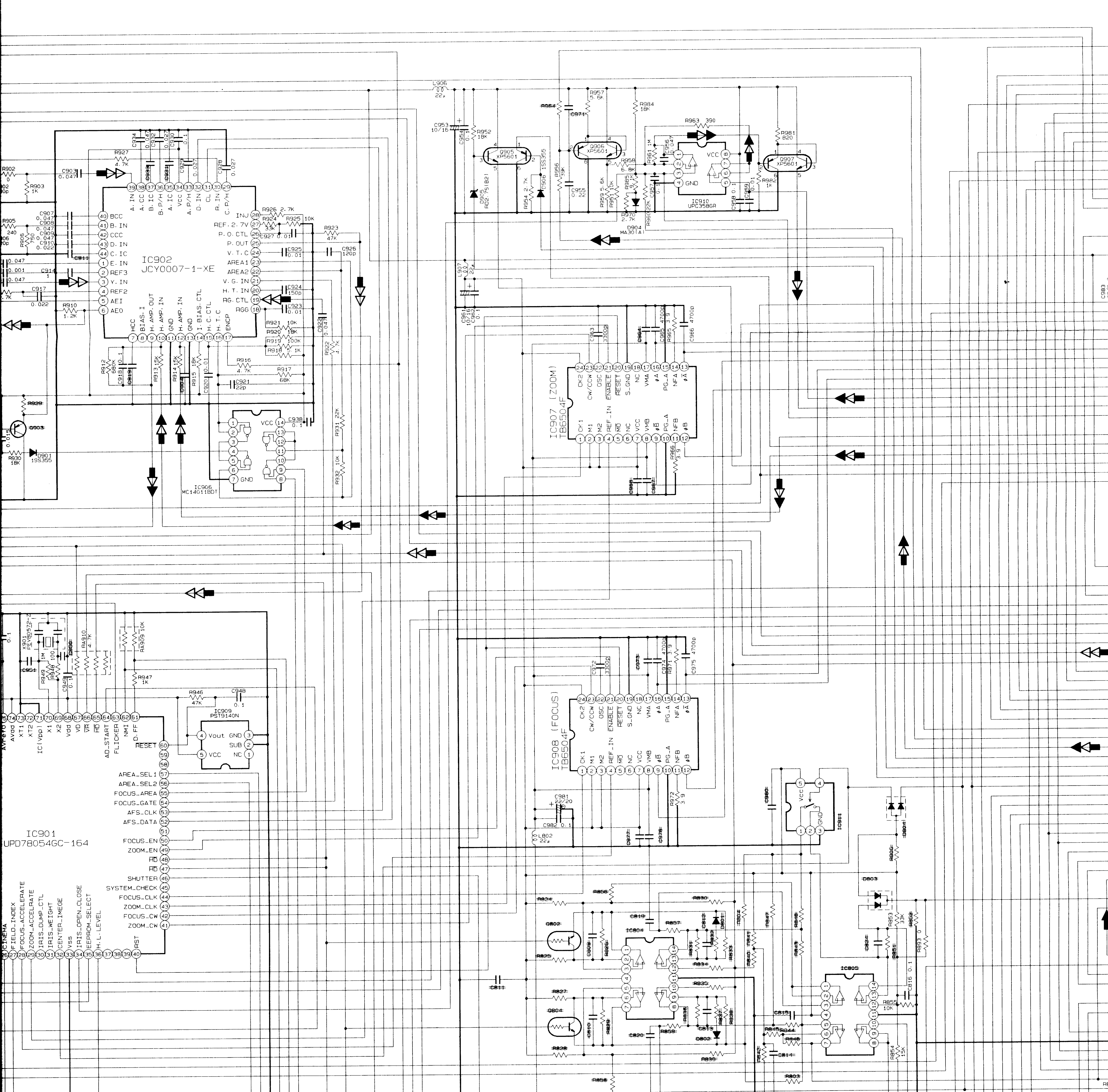
4.9 AF/CPU SHEMATIC DIAGRAM



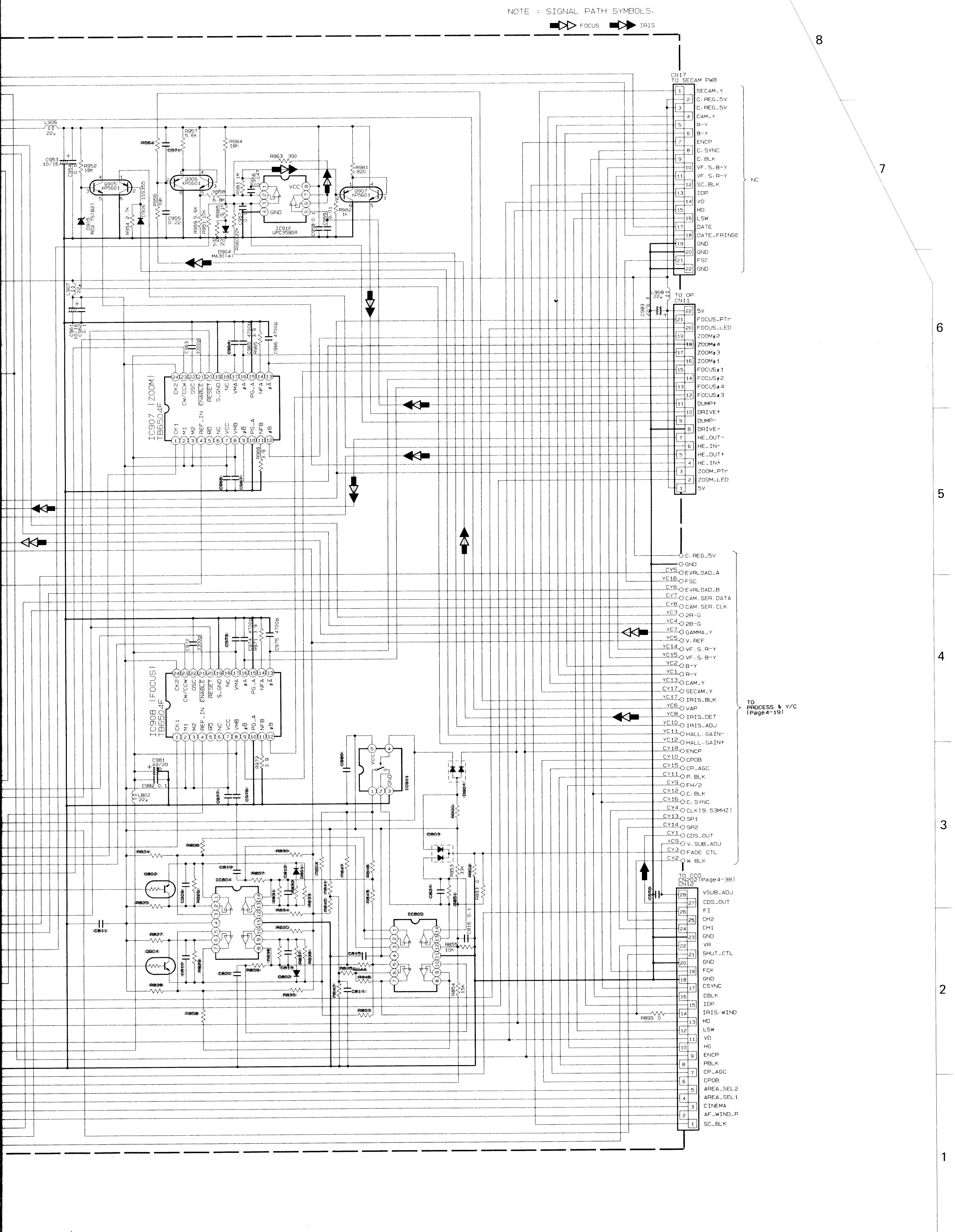
01 MAIN(AF/CPU)
IC901
UPD78054GC-164
IC902
JCY0007-1-XE
IC801
XRU4053BCF
IC802
XRA10324AFV-XE
IC803
XRA10358F
IC905
XRA10324AFV-XE
IC906
MC14011BDT
IC909
PST9140N
IC903
X25C02S-XE
IC904
S-81250HG-RD-X
Q805
XP1216
Q904
XP1216
Q901
DTC144WU
Q902
DTA114EU
D901
1SS355
D902
1SS355
D903
1SS355
TO IR
(Page4-3)
CN7
W/B
TO
PROCESS & Y/C
(Page4-19)
C.REG_5V
REF.R-Y
REF.B-Y
R.OFFSET
B.OFFSET
YC18
YC19
CY19
CY20
TO
SYSCON
(Page4-13, 14)
RXD
TXD
CAM.CPU.ON
SC_DATA
CS_DATA
SC_CLK
D.FF
CS_RDY
S_DATE
S_DATE_FRINGE
V.FADE
SC1
CS1
SC2
SC3
CS2
SC4
SC5
CS3
SC6
SC7
SC8
CN15
C.PWR_CTL
TO REAR
CN1
(Page4-33)
CAM_UNREG
CAM_UNREG
AW1
AW2
AW3
AVss
R.OFFSET
B.OFFSET
AVref1
RXD
TXD
CAM_MODE
DECK_SER_IN
DECK_SER_OUT
DECK_SER_CLK
SER_READY
CAM_SER_IN
CAM_SER_DATA
CAM_SER_CLK
F_SW
Z_SW
F/Z_SENSOR
HE
Y_AVERAGE
KOUKIDO
PINT_VOLT
AVref0
AVdd
XT1
XT2
IC(Vpp)
X1
X2
Vdd
VD
VA
HD
AD_START
FLICKER
NMI
D.FF
RESET
AREA_SEL1
AREA_SEL2
FOCUS_AREA
FOCUS_GATE
AFS_CLK
AFS_DATA
FOCUS_EN
ZOOM_EN
SHUTTER
SYSTEM_CHECK
FOCUS_CLK
ZOOM_CLK
FOCUS_CW
ZOOM_CW
A/D_TRIG
C.P_CTL
LEVELOAD_B
LEVELOAD_A
SAN_SELECT1
CINEMA
FIELD_INDEX
FOCUS_ACCELERATE
ZOOM_ACCELERATE
IRIS_DUMP_CTL
IRIS_WEIGHT
CENTER_IMEGE
Vss
IRIS_OPEN_CLOSE
EEPROM_SELECT
H.L.LEVEL
RST
A.IN
A.CC
B.IC
B.P/H
A.IC
Vcc
A.P/H
D.IN
CL
R.IN
C.P/H
BCC
B.IN
CCC
D.IN
C.IC
E.IN
REF3
Y.IN
REF2
AEI
AEO
INJ
REF.2.7V
P.O.CTL
P.OUT
V.T.C
AREA1
AREA2
V.G.IN
H.T.IN
RG.CTL
RGG
HCC
BIAS.I
H.AMP.OUT
H.AMP.IN
GND
H.AMP.IN
GND
I.BIAS.CTL
H.C.CTL
H.T.C
ENCP
R-Y
2R-G
IR
AW3
2B-G
INH
VEE
VSS
VDD
AW2
AW1
A
B
C
SC
SD
GND
VCC
CLK
SI
Vout
SUB
NC
L801 22µ
C801 0.1
C802 10/16
C804 0.1
C807 0.1
C803 0.1
C823 10/16
R823
R815 33K
R817 82K
R816 15K
R813 15K
R814 15K
R820 15K
R818 82K
R819 33K
R807 10K
R808 2.2K
R809 220K
R811 2.2K
R810 10K
R812 220K
C805 1
C806 1
R805 0
L803
C808 0.1
C817 0.047
C818 0.047
R901 1K
L901 180µ
C901 47p
L902 27µ
C902 330p
R902 0
R903 1K
C903 0.047
R904 1K
L909 220µ
C905 680p
L903 150µ
C906 220p
R905 240
R906 750
C907 0.047
C908 0.047
C909 0.047
C910 0.022
C911
R907 10K
C912 0.047
C913 0.001
C914 1
C915 0.047
C916 5p
R908 6.8K
R909 2.7K
C917 0.022
R910 1.2K
R927 4.7K
C934 0.047
C933
C932 0.027
C931
C930 0.027
C929 0.1
C928 0.027
C922
C918 0.1
R926 2.7K
R924 33K
R925 10K
C927 0.01
R923 47K
C925 0.01
C926 120p
C924 150p
C923 0.01
R921 10K
R920 18K
R919 100K
R918 5.1K
R922 4.7K
R916 4.7K
R917 68K
C921 22p
R912 680K
C919
R913 15K
R914 15K
C920 0.01
R915 18K
R929
R928 100
C937 0.015
Q903
R930 18K
C938 0.1
R931 22K
R932 10K
L904 22µ
C935 0.1
C936 10/16
L905 22µ
C985 0.1
C934 10/16
R980 5.6K
C939 10/6.3
C940 0.018
R934
C941 0.018
R933 820K
R939 2.2K
R940 330K
RA901 10K
C942 0.1
R935 1.5K
R936 22K
C943 10/6.3
R937 100K
R978 330K
R938 150K
R941 560K
C944 0.1
R950 47K
C952 0.1
X901 CSA5.00MG
C951
R949 1M
R948 100
C949 0.1
C950
RA910 4.7K
RA909 10K
R947 1K
R946 47K
C948 0.1
R943
R942 22K
R821 1M
R822 1M
R974 330
R975 330
RA902 1K
R979 10K
RA903 1K
RA904 47K
R945 100K
C945 0.1
RA905 330
C946 0.1
C947 10/6.3
C959

NOTE : SIGNAL PATH SYMBOLS

FOCUS IR

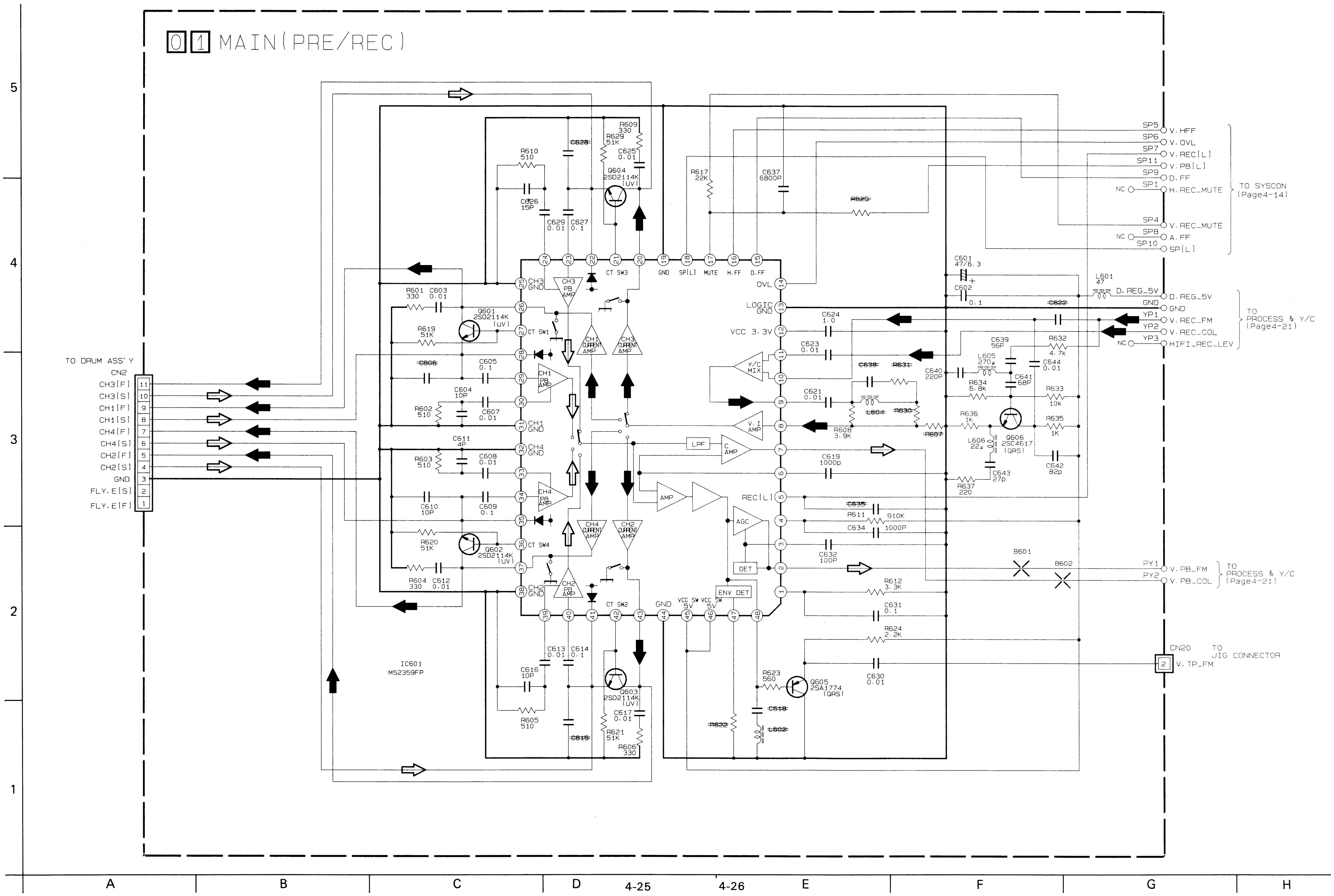


IC902
JCY0007-1-XE
A.IN
A.CC
B.IC
B.P/H
A.IC
Vcc
A.P/H
D.IN
CL
R.IN
C.P/H
BCC
B.IN
CCC
D.IN
C.IC
E.IN
REF3
Y.IN
REF2
AEI
AEO
INJ
REF.2.7V
P.O.CTL
P.OUT
V.T.C
AREA1
AREA2
V.G.IN
H.T.IN
RG.CTL
RGG
HCC
BIAS.I
H.AMP.OUT
H.AMP.IN
GND
H.AMP.IN
GND
I.BIAS.CTL
H.C.CTL
H.T.C
ENCP
IC906
MC14011BDT
IC901
UPD78054GC-164
IC909
PST9140N
Vout
GND
SUB
NC
VCC
RESET
AREA_SEL1
AREA_SEL2
FOCUS_AREA
FOCUS_GATE
AFS_CLK
AFS_DATA
FOCUS_EN
ZOOM_EN
SHUTTER
SYSTEM_CHECK
FOCUS_CLK
ZOOM_CLK
FOCUS_CW
ZOOM_CW
CINEMA
FIELD_INDEX
FOCUS_ACCELERATE
ZOOM_ACCELERATE
ZOOM_DUMP_CTL
IRIS_DUMP_CTL
IRIS_WEIGHT
CENTER_IMEGE
Vss
IRIS_OPEN_CLOSE
EEPROM_SELECT
H.L.LEVEL
RST
AVdd
XT1
XT2
IC(Vpp)
X1
X2
Vdd
AD_START
FLICKER
NMI
D.FF
X901
IC907 (ZOOM)
TB6504F
IC908 (FOCUS)
TB6504F
CK2
CW/CCW
OSC
ENABLE
RESET
S_GND
NC
VMA
PG_A
NFA
CK1
M1
M2
REF_IN
VCC
VMB
PG_B
NFB
IC910
UPC358GR
Q905
XP5601
Q906
XP5601
Q907
XP5601
D904
MA30(A)
D905
RD2.7S(B2)
D906
1SS355
D901
1SS355
Q903
IC804
IC805
IC811
Q802
Q804
D802
D803
L906
L802


NOTE : SIGNAL PATH SYMBOLS.
FOCUS
IRIS
8
7
6
5
4
3
2
1
F
E
D
C
B
A
L906
22μ
C953
10/16
C954
0.1
R952
18K
Q905
XP5601
D905
RD2.7S(B2)
R954 2.7K
D906 1SS355
~~R964~~
~~C971~~
R956
39K
C955
0.22
R957
5.6K
Q906
XP5601
R958
6.8K
R959 5.6K
R951 10K
R985
9.1K
R970
2.7K
R960 22K
C957
0.1
D904
MA30(A)
R984
18K
R963 390
R961 1M
C956
0.047
VCC
GND
IC910
UPC358GR
C958 0.1
C959
0.01
R981
820
R982
1K
Q907
XP5601
L907
22μ
C961
10/16
C962
0.1
C963
3300p
~~C964~~
C965
4700p
R965
3.9
C966 4700p
IC907 (ZOOM)
TB6504F
CK2
CW/CCW
OSC
ENABLE
RESET
S_GND
NC
VMA
φA
PG_A
NFA
φĀ
CK1
M1
M2
REF_IN
MO
NC
VCC
VMB
φB
PG_A
NFB
φB̄
R966
3.9
~~C968~~
~~C967~~
C972
3300p
~~C973~~
C974
4700p
R971
3.9
C975 4700p
IC908 (FOCUS)
TB6504F
R972
3.9
C981
22/20
C982 0.1
L802
22μ
~~C977~~
~~C976~~
~~C980~~
VCC
GND
~~IC911~~
~~D804~~
~~R806~~
~~D803~~
~~R824~~
~~R856~~
~~R830~~
~~Q802~~
~~C809~~
~~R826~~
~~R825~~
~~C819~~
~~IC804~~
~~R857~~
~~C812~~
~~R832~~
~~D801~~
~~R831~~
~~R833~~
~~R834~~
~~R804~~
~~R847~~
~~R848~~
~~R841~~
~~R840~~
~~R843~~
~~C811~~
~~R827~~
~~R835~~
~~Q804~~
~~C810~~
~~R829~~
~~R828~~
~~C820~~
~~R859~~
~~R836~~
~~C813~~
~~R837~~
~~R838~~
~~D802~~
~~R839~~
~~R858~~
~~C815~~
~~R845~~
~~R844~~
~~R846~~
~~R842~~
~~C814~~
~~R803~~
~~IC805~~
~~C824~~
~~R851~~
R853
33K
~~R852~~
R893 0
C816 0.1
R855
10K
R854
15K
CN17
TO SECAM PWB
1 SECAM_Y
2 C.REG_5V
3 C.REG_5V
4 CAM_Y
5 R-Y
6 B-Y
7 ENCP
8 C.SYNC
9 C.BLK
10 VF.S.B-Y
11 VF.S.R-Y
12 SC_BLK
13 IDP
14 VD
15 HD
16 LSW
17 DATE
18 DATE_FRINGE
19 GND
20 GND
21 FSC
22 GND
NC
L908
22μ
C983
22/6.3
TO OP
CN11
22 5V
21 FOCUS_PTr
20 FOCUS_LED
19 ZOOMφ2
18 ZOOMφ4
17 ZOOMφ3
16 ZOOMφ1
15 FOCUSφ1
14 FOCUSφ2
13 FOCUSφ4
12 FOCUSφ3
11 DUMP+
10 DRIVE+
9 DUMP-
8 DRIVE-
7 HE_OUT-
6 HE_IN-
5 HE_OUT+
4 HE_IN+
3 ZOOM_PTr
2 ZOOM_LED
1 5V
C.REG_5V
GND
CY5 EVRLOAD_A
YC16 FSC
CY6 EVRLOAD_B
CY7 CAM.SER.DATA
CY8 CAM.SER.CLK
YC3 2R-G
YC4 2B-G
YC7 GAMMA_Y
YC5 V.REF
YC14 VF.S.R-Y
YC15 VF.S.B-Y
YC2 B-Y
YC1 R-Y
YC13 CAM_Y
CY17 SECAM_Y
YC17 IRIS_BLK
YC6 VAP
YC8 IRIS_DET
YC10 IRIS_ADJ
YC11 HALL.GAIN-
YC12 HALL.GAIN+
CY18 ENCP
CY10 CPOB
CY15 CP_AGC
CY11 P.BLK
CY9 FH/2
CY12 C.BLK
CY16 C.SYNC
CY4 CLK(9.53MHZ)
CY13 SP1
CY14 SP2
CY1 CDS_OUT
YC9 V.SUB_ADJ
CY3 FADE CTL
CY2 W.BLK
TO
PROCESS & Y/C
(Page4-19)
~~C970~~
TO CCD
CN202(Page4-38)
CN12
28 VSUB_ADJ
27 CDS_OUT
26 FI
25 CH2
24 CH1
23 GND
22 VR
21 SHUT_CTL
20 GND
19 FCK
18 GND
17 CSYNC
16 CBLK
15 IDP
14 IRIS.WIND
13 HD
12 LSW
11 VD
10 HG
9 ENCP
8 PBLK
7 CP_AGC
6 CPOB
5 AREA_SEL2
4 AREA_SEL1
3 CINEMA
2 AF_WIND_P
1 SC_BLK
R899 0

F E D C B A

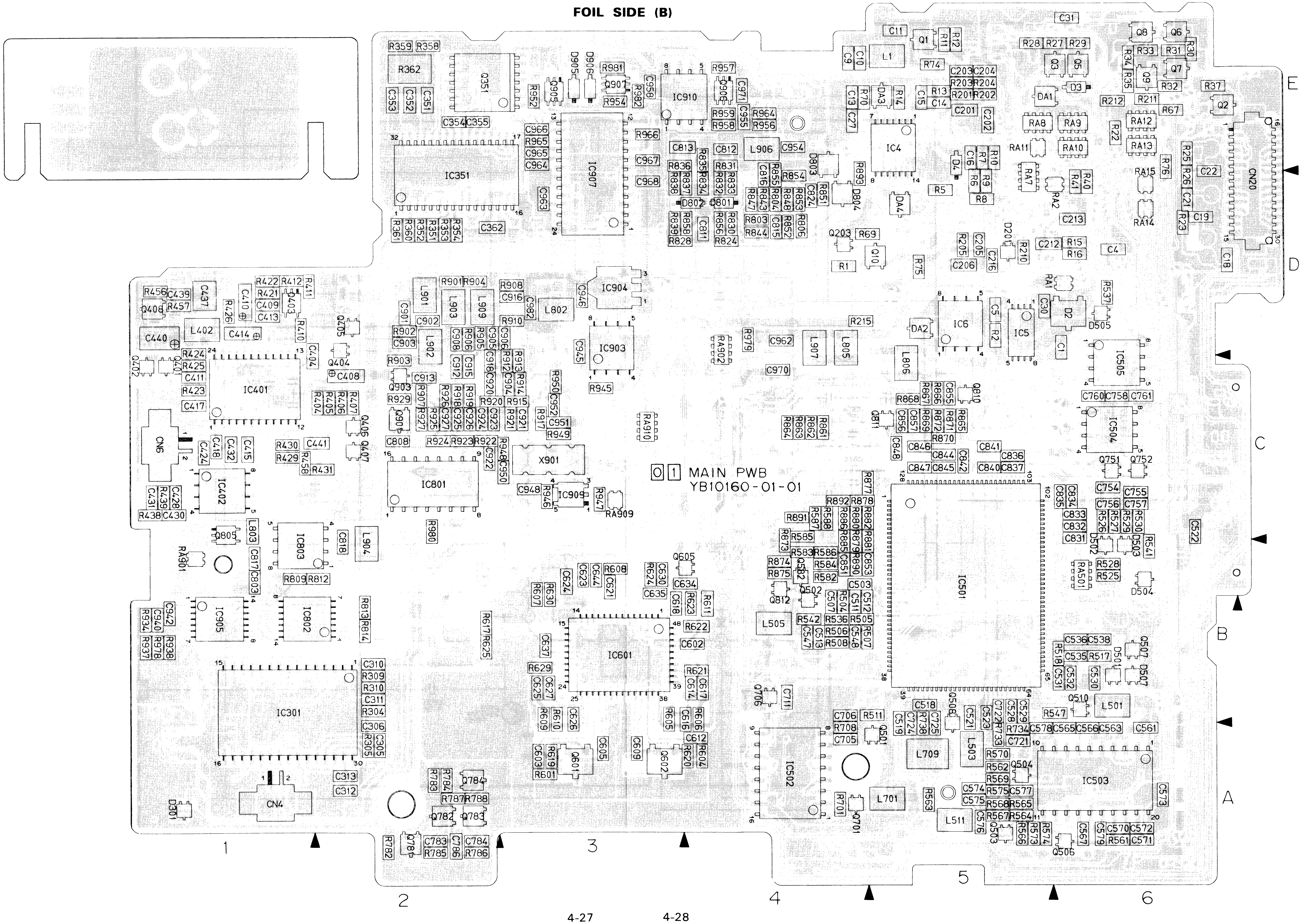
4.10 PRE/REC SCHEMATIC DIAGRAM



01 MAIN(PRE/REC)
TO DRUM ASS'Y
CN2
CH3[F] 11
CH3[S] 10
CH1[F] 9
CH1[S] 8
CH4[F] 7
CH4[S] 6
CH2[F] 5
CH2[S] 4
GND 3
FLY.E[S] 2
FLY.E[F] 1
IC601
M52359FP
R610 510
C626 15P
C628
C629 0.01
C627 0.1
R609 330
R629 51K
C625 0.01
Q604 2SD2114K (UV)
R617 22K
C637 6800P
R625
R601 330
C603 0.01
Q601 2SD2114K (UV)
R619 51K
C606
C605 0.1
C604 10P
R602 510
C607 0.01
C611 4P
R603 510
C608 0.01
C610 10P
C609 0.1
R620 51K
Q602 2SD2114K (UV)
R604 330
C612 0.01
C613 0.01
C614 0.1
C616 10P
R605 510
C615
Q603 2SD2114K (UV)
C617 0.01
R621 51K
R606 330
CH3 GND
CH3 PB AMP
CT SW3
CT SW1
CH1 CURRENT AMP
CH3 CURRENT AMP
CH1 PB AMP
CH1 GND
CH4 GND
CH4 PB AMP
CH4 CURRENT AMP
CH2 CURRENT AMP
CT SW4
CH2 PB AMP
CH2 GND
CT SW2
GND
SP[L]
MUTE
H.FF
D.FF
OVL
LOGIC GND
VCC 3.3V
Y/C MIX
V.I AMP
LPF
C AMP
AMP
REC[L]
AGC
DET
ENV DET
VCC SW 5V
VCC SW 5V
C601 47/6.3
C602 0.1
L601 47
D.REG_5V
C622
C624 1.0
C623 0.01
C638
R631
C621 0.01
L604
R630
R608 3.9K
R607
C619 1000p
C635
R611 910K
C634 1000P
C632 100P
R612 3.3K
C631 0.1
R624 2.2K
C630 0.01
R623 560
Q605 2SA1774 (QRS)
C618
L602
R622
C639 56P
L605 270μ
C640 220P
C641 68P
R634 6.8K
R632 4.7k
C644 0.01
R633 10k
R636 1K
Q606 2SC4617 (QRS)
L606 22μ
R635 1K
C643 27p
R637 220
C642 82p
B601
B602
SP5 V.HFF
SP6 V.OVL
SP7 V.REC[L]
SP11 V.PB[L]
SP9 D.FF
NC SP1 H.REC_MUTE
TO SYSCON (Page4-14)
SP4 V.REC_MUTE
NC SP8 A.FF
SP10 SP[L]
D.REG_5V
GND GND
YP1 V.REC_FM
YP2 V.REC_COL
NC YP3 HIFI_REC_LEV
TO PROCESS & Y/C (Page4-21)
PY1 V.PB_FM
PY2 V.PB_COL
TO PROCESS & Y/C (Page4-21)
CN20 TO JIG CONNECTOR
2 V.TP_FM
1 2 3 4 5
A B C D E F G H

4.11 MAIN AND APS CIRCUIT BOARDS

FOIL SIDE (B)


01 MAIN PWB
YB10160-01-01
IC301
IC351
IC401
IC402
IC501
IC502
IC503
IC504
IC505
IC601
IC801
IC802
IC803
IC903
IC904
IC905
IC907
IC909
IC910
IC4
IC5
IC6
CN4
CN6
CN20
X901
Q351
L402
L501
L503
L505
L511
L701
L709
L802
L805
L806
L901
L902
L903
L904
L906
L907
L909
L1
A
B
C
D
E
1
2
3
4
5
6

PARTS LOCATION GUIDE

REF.No.	LOCATION		
CAPACITOR			
C1	B	C	6D
C2	A	C	6D
C3	A	C	6D
C4	B	C	6D
C5	B	C	5D
C6	A	C	5D
C8	A	C	6B
C9	B	C	4E
C10	B	C	4E
C11	B	C	5E
C12	A	C	4E
C13	B	C	4E
C14	B	C	5E
C15	B	C	5E
C16	B	C	5E
C18	B	C	6D
C19	B	C	6D
C21	B	C	6D
C22	B	C	6E
C23	A	C	5D
C24	A	C	5D
C25	A	C	4E
C26	A	C	4E
C27	B	C	4E
C30	B	C	5D
C31	B	C	6E
C201	B	C	5E
C202	B	C	5E
C203	B	C	5E
C204	B	C	5E
C205	B	C	5D
C206	B	C	5D
C207	A	C	5D
C208	A	C	5D
C209	A	C	5D
C210	A	C	6D
C212	B	C	5D
C213	B	C	6D
C214	A	C	5D
C215	A	C	4D
C216	B	C	5D
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C302	A	C	1A
C303	A	C	1B
C304	A	C	2B
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C819	A	C	4E
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C982	B	C	3D
C983	A	C	3E
C984	A	C	1B
C985	A	C	3D
DIODE			
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D3	B	C	6E
D4	B	C	5E
D201	B	C	5D
D301	B	C	1A
D501	B	C	6B
D502	B	C	6C
D503	B	C	6C
D504	B	C	6B
D505	B	C	6D
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D802	B	C	4D
D803	B	C	4E
D804	B	C	4D
D901	A	C	2C
D902	A	C	1B
D903	A	C	2C
D904	A	C	3E
D905	B	C	3E
D906	B	C	3E
DA1	B	C	5E
DA2	B	C	5D
DA3	B	C	5E
DA4	B	C	5D
IC			
IC1	A	C	6E
IC2	A	C	5E
IC4	B	C	5E
IC5	B	C	5D
IC6	B	C	5D
IC301	B	C	1B
IC351	B	C	2E
IC401	B	C	1C
IC402	B	C	1C
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IC503	B	C	6A
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IC505	B	C	6D
IC601	B	C	3B
IC801	B	C	2C
IC802	B	C	1B
IC803	B	C	1C
IC804	A	C	4D
IC805	A	C	4D
IC901	A	C	3C
IC902	A	C	2C
IC903	B	C	3D
IC904	B	C	3D
IC905	B	C	1B
IC906	A	C	2C
IC907	B	C	3E
IC908	A	C	3D
IC909	B	C	3C
IC910	B	C	4E
IC911	A	C	4E
COIL			
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L401	A	C	1D
L402	B	C	1D
L501	B	C	6B
L502	A	C	5B
L503	B	C	5A
L504	A	C	5B
L505	B	C	4B
L507	A	C	6B
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L511	B	C	5A
L601	A	C	2B
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L702	A	C	4A
L703	A	C	4B
L704	A	C	4B
L705	A	C	4B
L707	A	C	5A
L708	A	C	5B
L709	B	C	5A
L752	A	C	6C
L753	A	C	6C
L781	A	C	2A
L782	A	C	2A
L783	A	C	2A
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L905	A	C	1B
L906	B	C	4E
L907	B	C	4D
L908	A	C	3E
L909	B	C	2D
TRANSISTOR			
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Q2	B	C	6E
Q3	B	C	6E
Q5	B	C	6E
Q6	B	C	6E
Q7	B	C	6E
Q8	B	C	6E
Q9	B	C	6E
Q10	B	C	5D
Q201	A	C	5D
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Q351	B	C	2E
Q401	B	C	1D
Q402	B	C	1D
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Q407	B	C	2C
Q408	B	C	1D
Q501	B	C	5B
Q502	B	C	4B
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Q510	B	C	6B
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Q752	B	C	6C
Q781	B	C	2A
Q782	B	C	2A
Q783	B	C	2A
Q784	B	C	2A
Q802	A	C	4D
Q804	A	C	4D
Q805	B	C	1C
Q810	B	C	5C
Q811	B	C	5C
Q812	B	C	4B
Q901	B	C	2C
Q902	A	C	2C
Q903	B	C	2C
Q904	A	C	4D
Q905	B	C	3E
Q906	B	C	4E
Q907	B	C	3E

REF.No.	LOCATION		
RESISTOR			
R1	B	C	4D
R2	B	C	5D
R3	A	C	5E
R4	A	C	4E
R5	B	C	5D
R6	B	C	5E
R7	B	C	5E
R8	B	C	5D
R9	B	C	5E
R10	B	C	5E
R11	B	C	5E
R12	B	C	5E
R13	B	C	5E
R14	B	C	5E
R15	B	C	6D
R16	B	C	6D
R22	B	C	6E
R23	B	C	6D
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R32	B	C	6E
R33	B	C	6E
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R35	B	C	6E
R36	A	C	6D
R37	B	C	6E
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R62	A	C	6D
R63	A	C	6D
R67	B	C	6E
R68	A	C	7E
R69	B	C	5D
R70	B	C	4E
R71	A	C	5E
R72	A	C	6C
R73	A	C	2D
R74	B	C	5E
R75	B	C	5D
R76	B	C	6E
R201	B	C	5E
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R209	A	C	4D
R210	B	C	5D
R211	B	C	6E
R212	B	C	6E
R213	A	C	5E
R214	A	C	6E
R215	B	C	4D
R216	A	C	5D
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R623	B	C	4B
R624	B	C	3B
R625	B	C	2B
R629	B	C	3B
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R631	A	C	3B
R632	A	C	4B
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R634	A	C	3B
R635	A	C	3B
R636	A	C	3B
R637	A	C	3B
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R702	A	C	4A
R703	A	C	4A
R704	A	C	4A
R708	B	C	4B
R709	A	C	4B
R710	A	C	4B
R711	A	C	4A
R718	A	C	4A
R720	A	C	4A
R721	A	C	4A
R722	A	C	4A
R723	A	C	4A
R724	A	C	4A
R726	A	C	5A
R727	A	C	5A
R728	A	C	5A
R729	A	C	5B
R730	A	C	5A
R731	A	C	5B
R732	A	C	5A
R733	B	C	5B
R734	B	C	5B
R735	A	C	5B
R736	A	C	5A
R738	B	C	5B
R739	A	C	2D
R740	A	C	5A
R741	A	C	4B
R751	A	C	6B
R752	A	C	6C
R753	A	C	6C
R754	A	C	6B
R755	A	C	6C
R756	A	C	6C
R757	A	C	6C
R758	A	C	6C
R759	A	C	6C
R760	A	C	6C
R761	A	C	6C
R762	A	C	6C
R763	A	C	4B
R782	B	C	2A
R783	B	C	2A
R784	B	C	2A
R785	B	C	2A
R786	B	C	2A
R787	B	C	2A
R788	B	C	2A
R803	B	C	4D
R804	B	C	4D
R805	A	C	1C
R806	B	C	4D
R807	A	C	1B
R808	A	C	1B
R809	B	C	1B
R810	A	C	1B
R811	A	C	1B
R812	B	C	2B
R813	B	C	2B
R814	B	C	2B
R815	A	C	2B
R816	A	C	2B
R817	A	C	2B
R818	A	C	2B
R819	A	C	2B
R820	A	C	2B
R821	A	C	4D
R822	A	C	4D
R823	A	C	2B
R824	B	C	4D
R825	A	C	4D
R826	A	C	4D
R827	A	C	4D
R828	B	C	3D
R829	A	C	3D
R830	B	C	4D
R831	B	C	4E
R832	B	C	4E
R833	B	C	4E
R834	B	C	4E
R835	B	C	4E
R836	B	C	3E
R837	B	C	4E
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R862	B	C	4C
R863	B	C	4C
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R888	A	C	4B
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R893	B	C	4E
R894	A	C	6A
R895	A	C	6A
R896	A	C	6A
R897	A	C	6A
R898	A	C	5C
R899	A	C	4C
R901	B	C	2D
R902	B	C	2D
R903	B	C	2D
R904	B	C	2D
R905	B	C	2D
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R909	A	C	3D
R910	B	C	3D
R912	B	C	3D
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R914	B	C	3C
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R917	B	C	3C
R918	B	C	2C
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R934	B	C	1B
R935	A	C	1C
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R939	A	C	1B
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R949	B	C	3C
R950	B	C	3C
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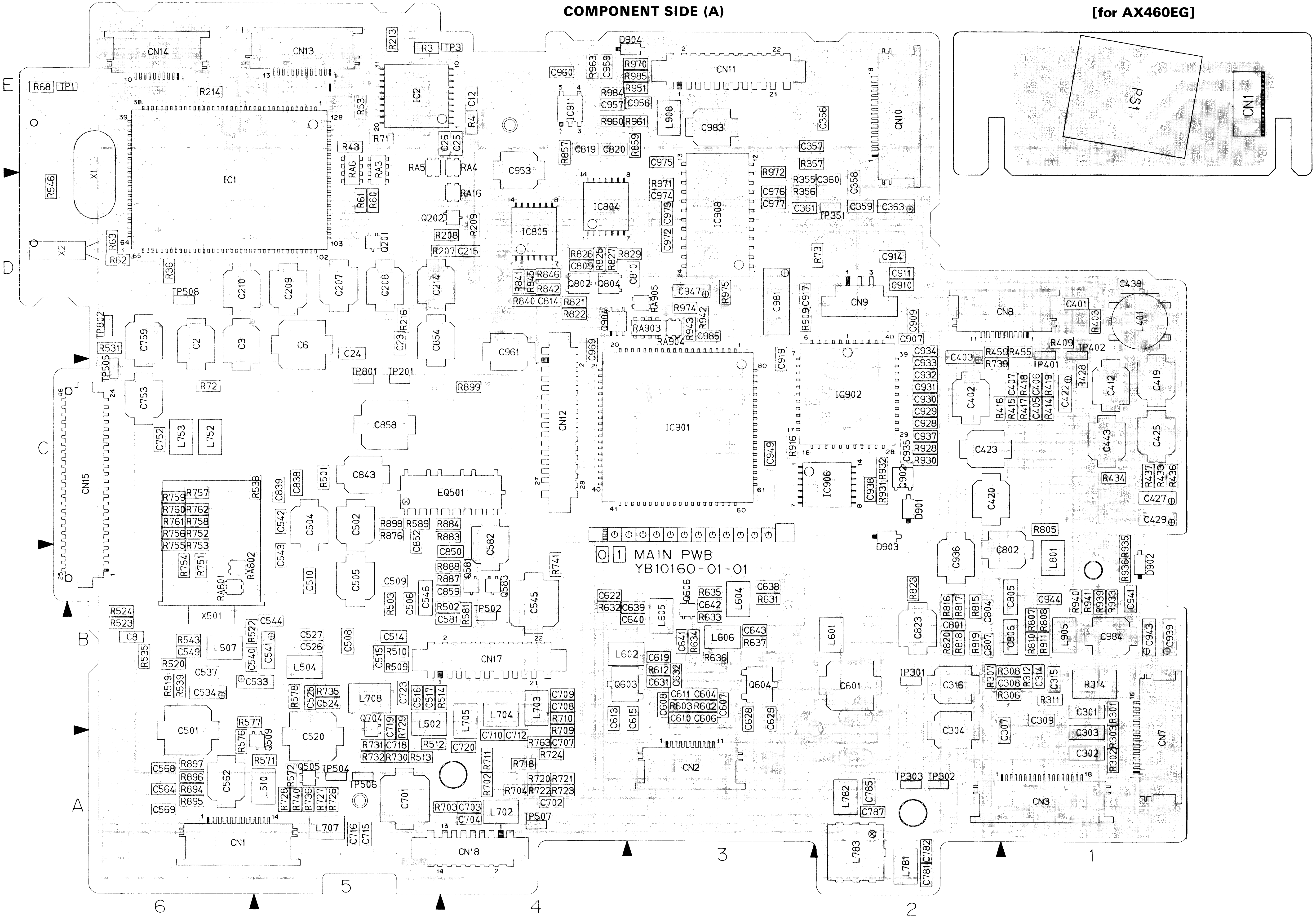
R961	A	C	3E
R963	A	C	4E
R964	B	C	4E
R965	B	C	3E
R966	B	C	3E
R970	A	C	3E
R971	A	C	3E
R972	A	C	3E
R974	A	C	3D
R975	A	C	3D
R978	B	C	1B
R979	B	C	4D
R980	B	C	2C
R981	B	C	3E
R982	B	C	3E
R984	A	C	4E
R985	A	C	3E
NETWORK RESISTOR			
RA1	B	C	6D
RA2	B	C	6E
RA3	A	C	5E
RA4	A	C	4E
RA5	A	C	5E
RA6	A	C	5E
RA7	B	C	5E
RA8	B	C	5E
RA9	B	C	6E
RA10	B	C	6E
RA11	B	C	5E
RA12	B	C	6E
RA13	B	C	6E
RA14	B	C	6D
RA15	B	C	6E
RA16	A	C	4D
RA501	B	C	6B
RA801	A	C	6B
RA802	A	C	6B
RA901	B	C	1B
RA902	B	C	4D
RA903	A	C	3D
RA904	A	C	3D
RA905	A	C	3D
RA909	B	C	3C
RA910	B	C	3C
CONNECTOR			
CN1	A	C	6A
CN2	A	C	3A
CN3	A	C	1A
CN4	B	C	1A
CN6	B	C	1C
CN7	A	C	1A
CN8	A	C	1D
CN9	A	C	2D
CN10	A	C	2E
CN11	A	C	3E
CN12	A	C	4D
CN13	A	C	5E
CN14	A	C	6E
CN15	A	C	6B
CN17	A	C	4B
CN18	A	C	4A
CN20	B	C	7E
TEST POINT			
TP1	A	C	7E
TP3	A	C	4E
TP201	A	C	5C
TP301	A	C	2B
TP302	A	C	2A
TP303	A	C	2A
TP351	A	C	2D
TP401	A	C	1D
TP402	A	C	1D
TP502	A	C	4B
TP504	A	C	5A
TP505	A	C	6D
TP506	A	C	5A
TP507	A	C	4A
TP508	A	C	6D
TP801	A	C	5C
TP802	A	C	6D
RESONATOR			
X2	A	D	6D
X501	A	D	6B
X901	B	C	3C
EQUALIZER			
EQ501	A	C	4C

COMPONENT SIDE (A)

[for AX460EG]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D
C
B
A
6
5
4
3
2
1
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CN13
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R3
TP3
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CN11
CN10
PS1
CN1
R68
TP1
R214
IC2
R53
C12
R4
C26
C25
R71
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R970
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C356
IC1
X1
R546
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RA6
RA3
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RA4
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Q201
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C215
X2
R63
R62
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TP508
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R859
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IC908
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CN8
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R531
TP505
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C23
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IC901
C919
IC902
C934
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C931
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C928
C937
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C935
C403
R459
R455
R739
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TP401
TP402
R428
C402
R416
R415
C407
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R418
C405
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R419
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C412
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TP801
TP201
R72
R899
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CN15
C752
L753
L752
C858
C843
EQ501
C423
C443
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C949
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R932
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R436
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R753
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R751
RA802
RA801
X501
C542
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R884
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R888
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R887
C509
C859
Q583
C546
R503
C506
R502
C581
R581
TP502
C545
R741
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R935
R936
D902
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R523
C8
R535
R543
C549
L507
R522
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C540
C541
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C508
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R519
R539
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C514
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C515
R509
CN17
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R632
C639
C640
L605
Q606
R635
C642
R633
L604
C638
R631
L601
R823
C823
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C805
C801
C944
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R941
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R933
C941
C943
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R808
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Q509
C520
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R729
C723
C516
C517
R514
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L703
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C708
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R724
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R603
R602
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C606
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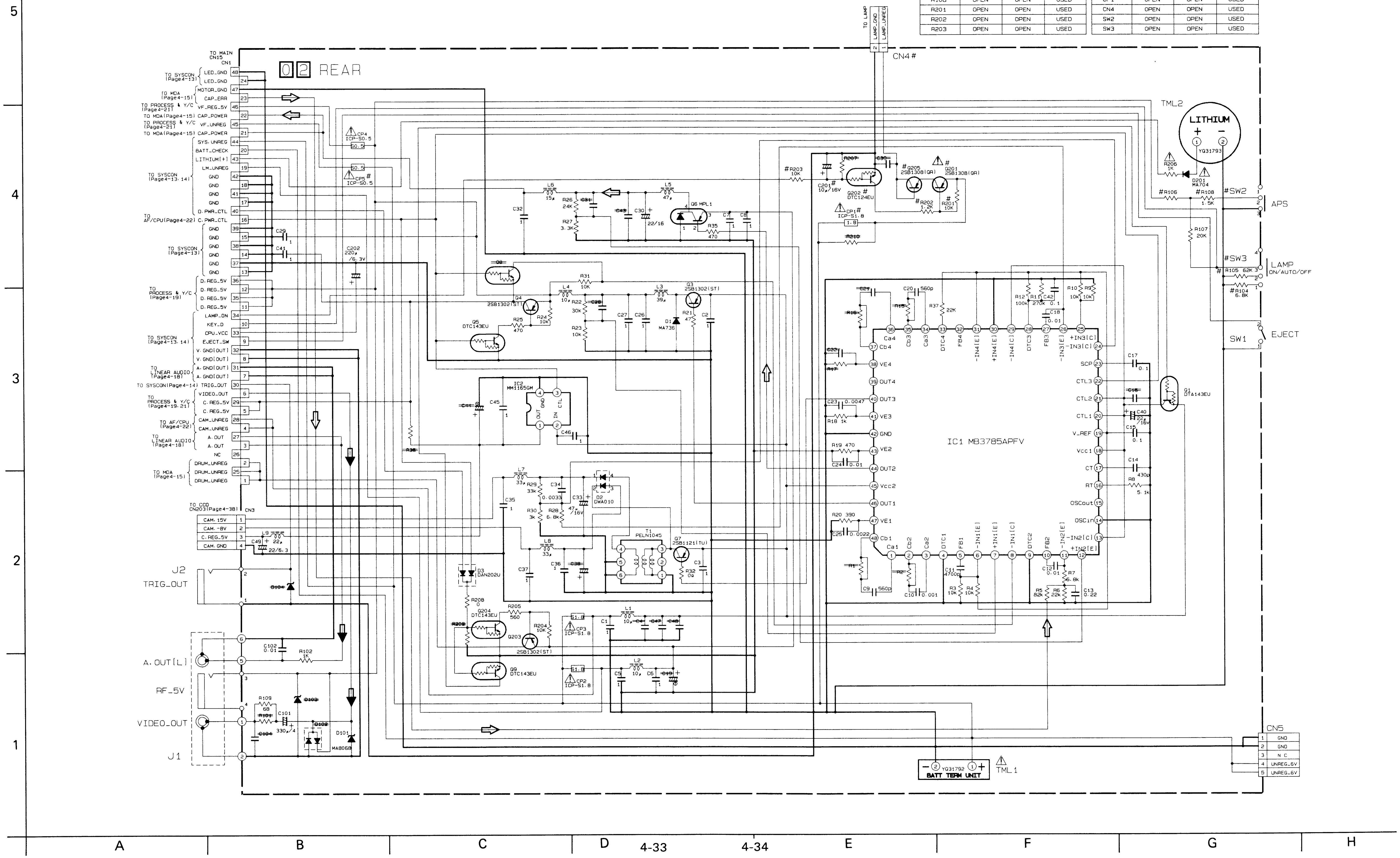
C307
C309
C301
R301
C303
R303
C302
R302
CN7
R731
C718
R732
R730
R513
R512
C720
C710
C712
R571
C568
R897
C562
L510
R896
C564
R894
R895
C569
R572
Q505
TP504
TP506
R728
R740
R736
R727
R726
C701
R711
R702
R718
R720
R721
R704
R722
R723
C702
R703
C703
C704
L702
TP507
CN2
TP303
TP302
CN3
L782
C785
C787
L783
L781
C782
C781
CN1
L707
C716
C715
CN18

4.12 REAR SCHEMATIC DIAGRAM

NOTE : COMPARISON CHART OF MODELS & MARKS(#)

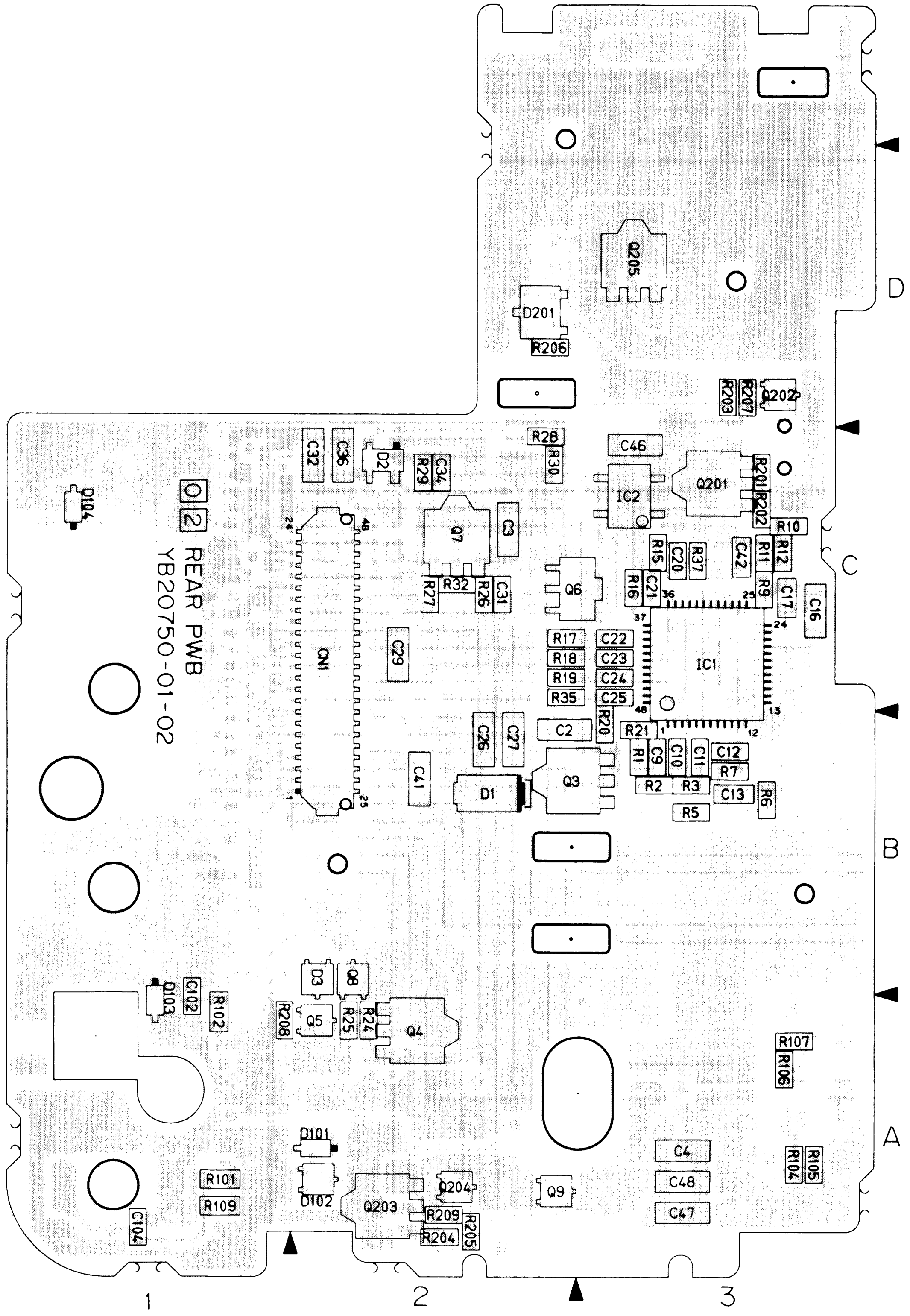
REF. NO	MODELS		
	GR-AX260EG	GR-AX360EG	GR-AX460EG
CP5	OPEN	USED	OPEN
R104	OPEN	OPEN	USED
R105	OPEN	OPEN	USED
R106	0Ω	0Ω	1.5K
R108	OPEN	OPEN	USED
R201	OPEN	OPEN	USED
R202	OPEN	OPEN	USED
R203	OPEN	OPEN	USED

REF. NO	MODELS		
	GR-AX260EG	GR-AX360EG	GR-AX460EG
C201	OPEN	OPEN	USED
Q201	OPEN	OPEN	USED
Q202	OPEN	OPEN	USED
Q205	OPEN	OPEN	USED
CP1	OPEN	OPEN	USED
CN4	OPEN	OPEN	USED
SW2	OPEN	OPEN	USED
SW3	OPEN	OPEN	USED


02 REAR
TO MAIN CN15
CN1
TO SYSCON (Page4-13)
LED_GND
TO MDA (Page4-15)
MOTOR_GND
CAP_ERR
TO PROCESS & Y/C (Page4-21)
VF_REG_5V
TO MDA (Page4-15) CAP_POWER
VF_UNREG
CAP_POWER
SYS.UNREG
BATT_CHECK
LITHIUM(+)
LM_UNREG
TO SYSCON (Page4-13, 14)
GND
D.PWR_CTL
TO AF/CPU (Page4-22) C.PWR_CTL
TO SYSCON (Page4-13)
TO PROCESS & Y/C (Page4-19)
D.REG_5V
LAMP_ON
KEY_D
CPU_VCC
EJECT_SW
V.GND(OUT)
TO LINEAR AUDIO (Page4-18)
A.GND(OUT)
TO SYSCON (Page4-14) TRIG_OUT
VIDEO_OUT
TO PROCESS & Y/C (Page4-19, 21)
C.REG_5V
TO AF/CPU (Page4-22)
CAM_UNREG
A.OUT
NC
TO MDA (Page4-15)
DRUM_UNREG
TO CCD CN203 (Page4-38)
CN3
CAM.15V
CAM.-8V
C.REG.5V
CAM.GND
J2
TRIG_OUT
A.OUT(L)
RF_5V
VIDEO_OUT
J1
TO LAMP
LAMP_GND
LAMP_UNREG
CN4#
TML2
LITHIUM
YQ31793
#SW2
APS
#SW3
LAMP ON/AUTO/OFF
SW1
EJECT
IC1 MB3785APFV
IC2 MM1165GM
T1 PELN1045
Q1 DTA143EU
Q3 2SB1302(ST)
Q4 2SB1302(ST)
Q5 DTC143EU
Q6 MPL1
Q7 2SB1121(TU)
Q9 DTC143EU
Q202 DTC124EU
Q203 2SB1302(ST)
Q204 DTC143EU
#Q205 2SB1308(QR)
#Q201 2SB1308(QR)
D1 MA736
D2 DWA010
D3 DAN202U
D101 MA8068
D201 MA704
ICP-S0.5
ICP-S1.8
BATT TERM UNIT
YQ31792
TML1
CN5
GND
N.C
UNREG_6V
1
2
3
4
5
A
B
C
D
E
F
G
H

4.13 REAR CIRCUIT BOARD

FOIL SIDE (B)


Q205
D201
R206
R203
R207
Q202
R28
R30
C46
Q201
R201
R202
IC2
C32
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D2
R29
C34
C3
Q7
R27
R32
R26
C31
Q6
R15
C20
R37
C42
R11
R12
R10
R16
C21
R9
C17
C16
D104
REAR PWB
YB20750-01-02
CN1
C29
R17
R18
R19
R35
C22
C23
C24
C25
IC1
R20
C26
C27
C2
R21
R1
C9
C10
C11
C12
R7
C13
R6
R2
R3
R5
C41
D1
Q3
D3
Q8
Q5
R208
R25
R24
Q4
D103
C102
R102
R107
R106
D101
D102
R101
R109
C104
Q203
Q204
R209
R204
R205
Q9
C4
C48
C47
R105
R104
D
C
B
A
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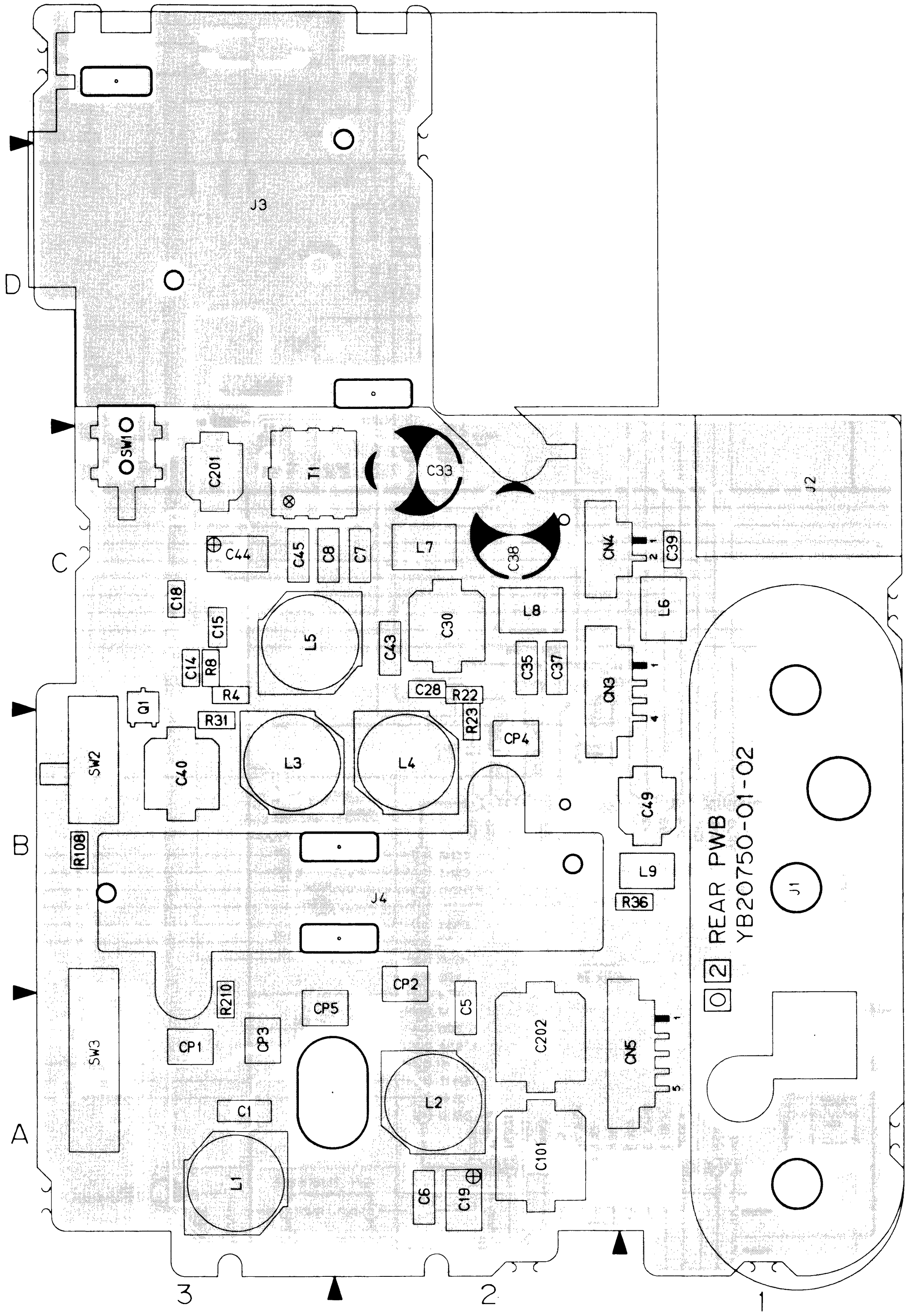
2
3

COMPONENT SIDE (A)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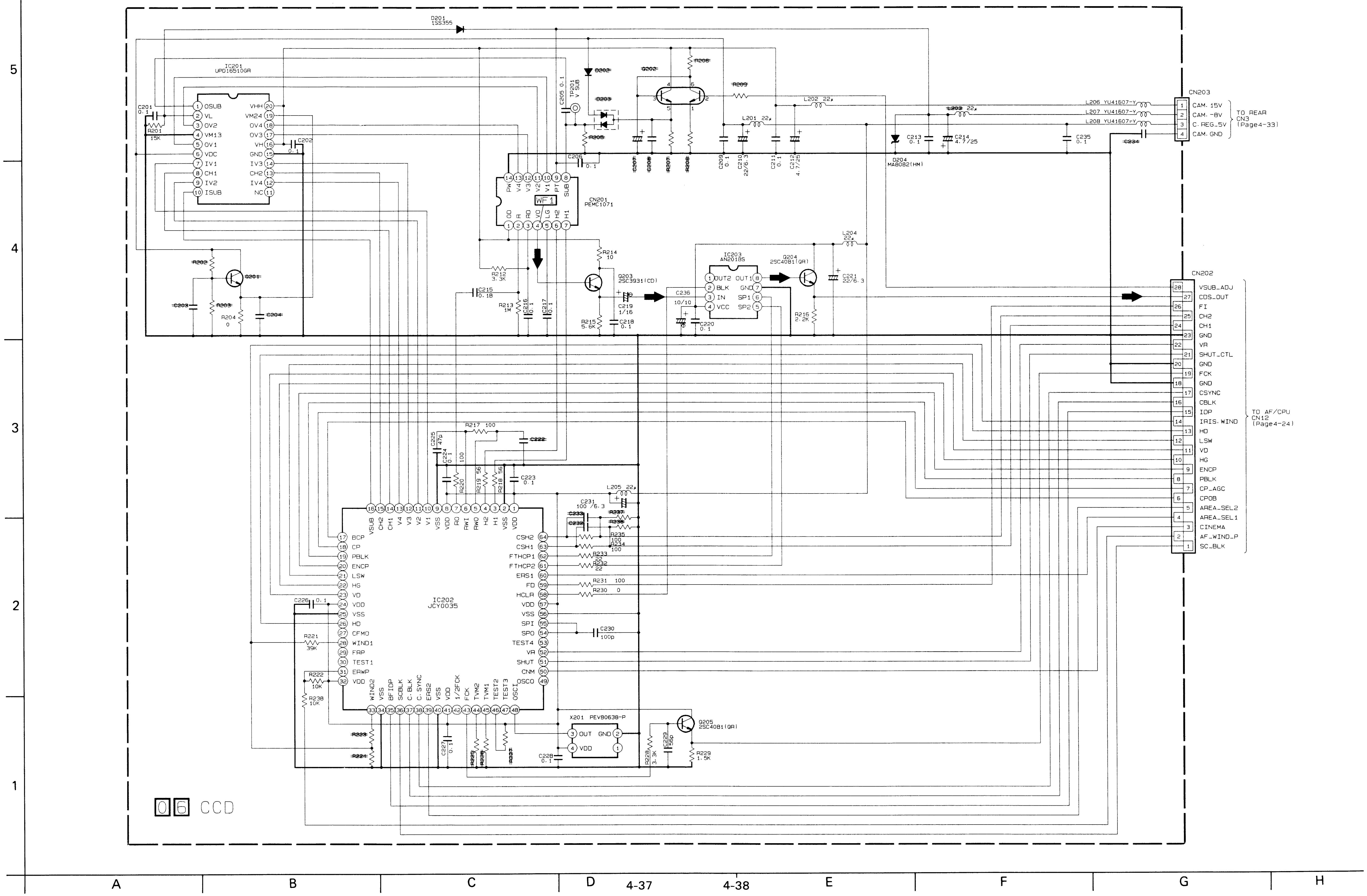
D
SW1
C201
T1
C33
J2
C44
C45
C8
C7
L7
C38
CN4
C39
L6
C18
C15
L5
C43
C30
L8
C35
C37
CN3
C14
R8
R4
C28
R22
R23
CP4
Q1
R31
SW2
C40
L3
L4
C49
R108
J4
L9
R36
J1
REAR PWB
YB20750-01-02
CN5
CP2
C5
R210
CP5
CP3
CP1
SW3
C202
L2
C1
L1
C101
C6
C19
C
B
A
3
2
1

COMPONENT PARTS LOCATION GUIDE

REF.No.	LOCATION		
CAPACITOR			
C1	A	C	3A
C2	B	C	2B
C3	B	C	2C
C4	B	C	3A
C5	A	C	2A
C6	A	C	2A
C7	A	C	2C
C8	A	C	3C
C9	B	C	3B
C10	B	C	3B
C11	B	C	3B
C12	B	C	3B
C13	B	C	3B
C14	A	C	3C
C15	A	C	3C
C16	B	C	3C
C17	B	C	3C
C18	A	C	3C
C19	A	C	2A
C20	B	C	3C
C21	B	C	3C
C22	B	C	3C
C23	B	C	3C
C24	B	C	3C
C25	B	C	3C
C26	B	C	2B
C27	B	C	2B
C28	A	C	2C
C29	B	C	2C
C30	A	C	2C
C31	B	C	2C
C32	B	C	2C
C33	A	D	2C
C34	B	C	2C
C35	A	C	2C
C36	B	C	2C
C37	A	C	2C
C38	A	D	2C
C39	A	C	1C
C40	A	C	3B
C41	B	C	2B
C42	B	C	3C
C43	A	C	2C
C44	A	C	3C
C45	A	C	3C
C46	B	C	3C
C47	B	C	3A
C48	B	C	3A
C49	A	C	1B
C101	A	C	2A
C102	B	C	1A
C104	B	C	1A
C201	A	C	3C
C202	A	C	2A
CONNECTOR			
CN1	B	C	2B
CN3	A	C	1C
CN4	A	C	1C
CN5	A	C	1A
CP			
CP1	A	C	3A
CP2	A	C	2B
CP3	A	C	3A
CP4	A	C	2B
CP5	A	C	3A
DIODE			
D1	B	C	2B
D2	B	C	2C
D3	B	C	2B
D101	B	C	2A
D102	B	C	2A
D103	B	C	1A
D104	B	C	1C
D201	B	C	2D
IC			
IC1	B	C	3C
IC2	B	C	3C
COIL			
L1	A	C	3A
L2	A	C	2A
L3	A	C	3B
L4	A	C	2B
L5	A	C	3C
L6	A	C	1C
L7	A	C	2C
L8	A	C	2C
L9	A	C	1B
TRANSISTOR			
Q1	A	C	3C
Q3	B	C	2B
Q4	B	C	2A
Q5	B	C	2A
Q6	B	C	2C
Q7	B	C	2C
Q8	B	C	2B
Q9	B	C	2A
Q201	B	C	3C
Q202	B	C	3D
Q203	B	C	2A
Q204	B	C	2A
Q205	B	C	3D
RESISTOR			
R1	B	C	3B
R2	B	C	3B
R3	B	C	3B
R4	A	C	3C
R5	B	C	3B
R6	B	C	3B
R7	B	C	3B
R8	A	C	3C
R9	B	C	3C
R10	B	C	3C
R11	B	C	3C
R12	B	C	3C
R15	B	C	3C
R16	B	C	3C
R17	B	C	2C
R18	B	C	2C
R19	B	C	2C
R20	B	C	3B
R21	B	C	3B
R22	A	C	2C
R23	A	C	2B
R24	B	C	2A
R25	B	C	2A
R26	B	C	2C
R27	B	C	2C
R28	B	C	2C
R29	B	C	2C
R30	B	C	2C
R31	A	C	3B
R32	B	C	2C
R35	B	C	2C
R36	A	C	1B
R37	B	C	3C
R101	B	C	1A
R102	B	C	1A
R104	B	C	3A
R105	B	C	3A
R106	B	C	3A
R107	B	C	3A
R108	A	C	3B
R109	B	C	1A
R201	B	C	3C
R202	B	C	3C
R203	B	C	3D
R204	B	C	2A
R205	B	C	2A
R206	B	C	2D
R207	B	C	3D
R208	B	C	1A
R209	B	C	2A
R210	A	C	3A
SWITCH			
SW1	A	C	3C
SW2	A	D	3B
SW3	A	D	3A
SW TRANS			
T1	A	C	3C

4.14 CCD SCHEMATIC DIAGRAM

NOTE : A DC-DC converter is included in the IC of this CCD circuit. Use ample care when checking the voltages. Even a brief shorting of the pins can destroy the IC.

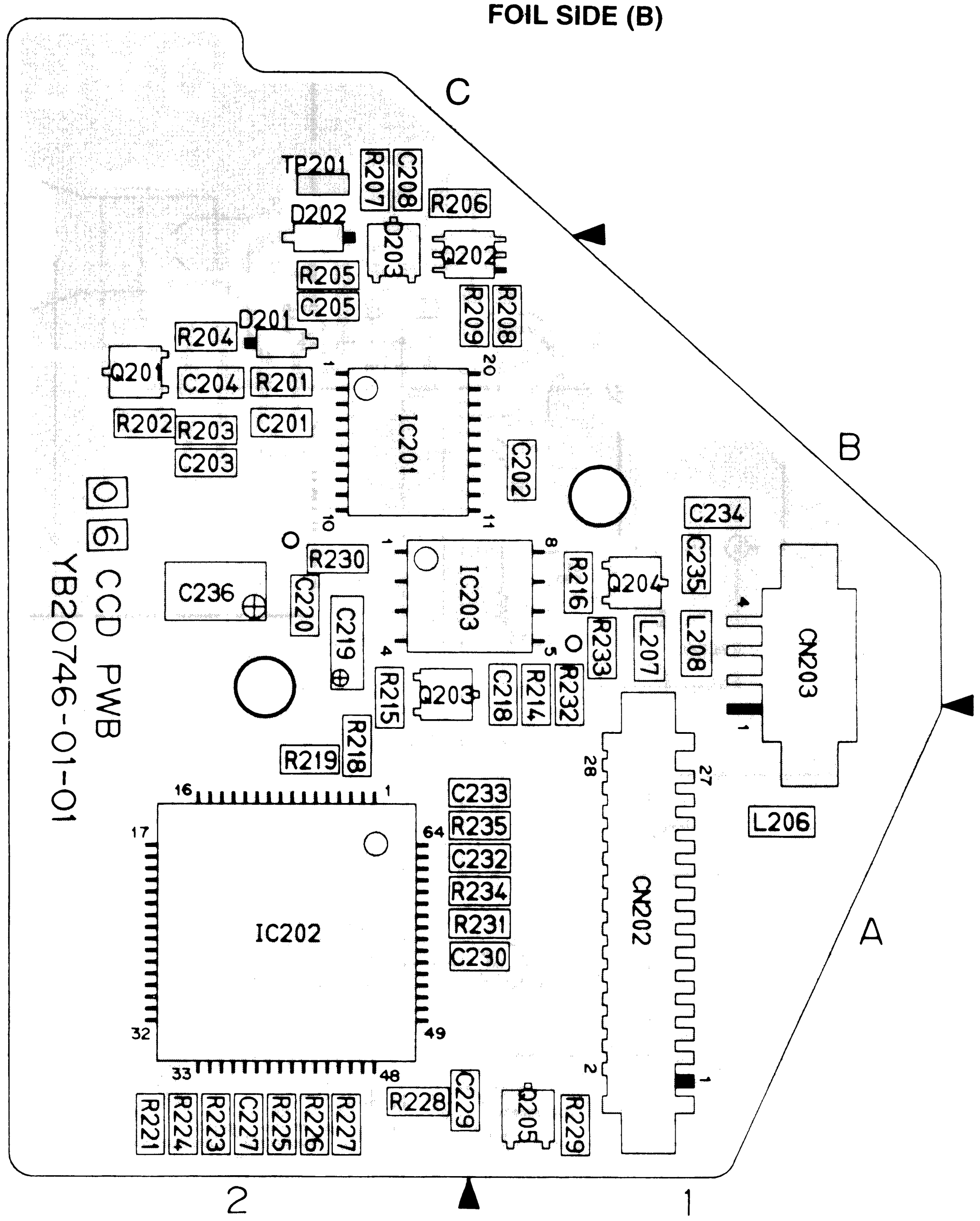


D201 1SS355
IC201 UPD16510GR
OSUB
VL
OV2
VM13
OV1
VDC
IV1
CH1
IV2
ISUB
VHH
VM24
OV4
OV3
VH
GND
IV3
CH2
IV4
NC
C201 0.1
R201 15K
C202 0.1
C205 0.1
TP201 V SUB
Q202
R206
R209
L202 22μ
L201 22μ
R205
C206 0.1
C207
C208
R207
R208
C209 0.1
C210 22/6.3
C211 0.1
C212 4.7/25
CN201 PEMC1071
WF1
PW V4 V3 V2 V1 PT SUB
OD R RD VO LG H2 H1
C213 0.1
C214 4.7/25
L203 22μ
D204 MA8082(HM)
C235 0.1
C234
L206 YU41607-Y
L207 YU41607-Y
L208 YU41607-Y
CN203
CAM. 15V
CAM. -8V
C. REG. 5V
CAM. GND
TO REAR CN3 (Page4-33)
R202
Q201
C203
R203
R204 0
C204
R212 3.3K
C215 0.18
R213 1M
C216 0.1
C217 0.1
R214 10
Q203 2SC3931(CD)
C219 1/16
R215 5.6K
C218 0.1
IC203 AN2018S
OUT2 OUT1
BLK GND
IN SP1
VCC SP2
C236 10/10
C220 0.1
Q204 2SC4081(QR)
L204 22μ
C221 22/6.3
R216 2.2K
CN202
VSUB_ADJ
CDS_OUT
FI
CH2
CH1
GND
VR
SHUT_CTL
GND
FCK
GND
CSYNC
CBLK
IDP
IRIS. WIND
HD
LSW
VD
HG
ENCP
PBLK
CP_AGC
CPOB
AREA_SEL2
AREA_SEL1
CINEMA
AF_WIND_P
SC_BLK
TO AF/CPU CN12 (Page4-24)
R217 100
C222
C225 47p
C224 0.1
R220 100
R219 56
R218 56
C223 0.1
L205 22μ
C231 100/6.3
R237
C233
R236
C232
R235 100
R234 100
R233 22
R232 22
R231 100
R230 0
C230 100p
IC202 JCY0035
VSUB CH2 CH1 V4 V3 V2 V1 VSS VDD RO RWI RWO H2 H1 VSS VDD
BCP
CP
PBLK
ENCP
LSW
HG
VD
VDD
VSS
HD
CFMO
WIND1
FRP
TEST1
ERWP
VDD
CSH2
CSH1
FTHCP1
FTHCP2
ERS1
FD
HCLR
VDD
VSS
SPI
SPO
TEST4
VR
SHUT
CNM
OSCO
WIND2 VSS BFIDP SCBLK C.BLK C.SYNC ERS2 VSS VDD 1/2FCK FCK TVM2 TVM1 TEST2 TEST3 OSCI
C226 0.1
R221 39K
R222 10K
R238 10K
R223
R224
C227 0.1
R225
R226
R227
X201 PEV8063B-P
OUT GND
VDD
C228 0.1
R228 3.3K
C229 56p
Q205 2SC4081(QR)
R229 1.5K
06 CCD
5
4
3
2
1
A
B
C
D
E
F
G
H

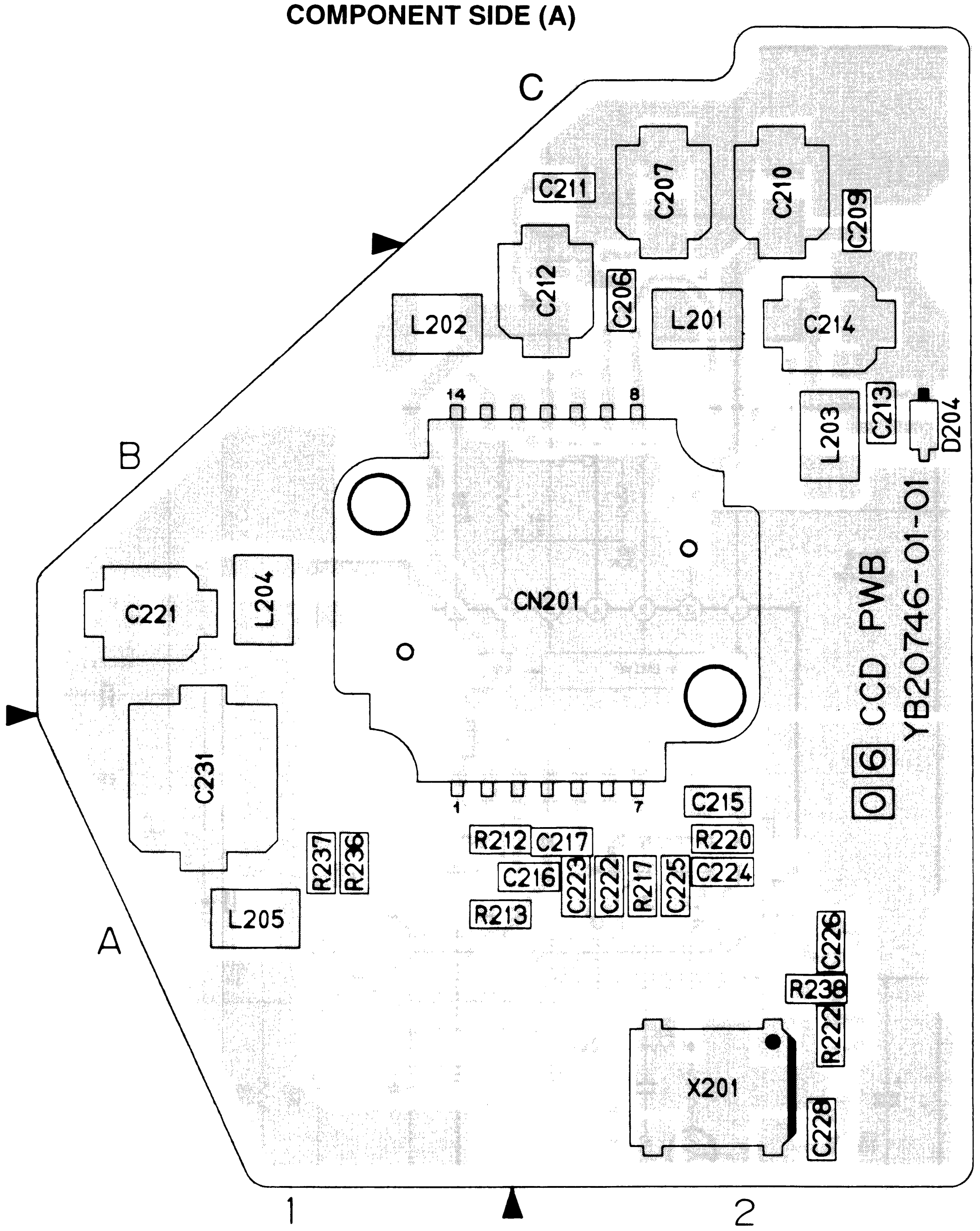
4.15 CCD AND UPPER DRUM CIRCUIT BOARDS

-CCD-

FOIL SIDE (B)


C
B
A
2
1
TP201
R207
C208
R206
D202
D203
Q202
R205
C205
R209
R208
D201
R204
Q201
C204
R201
R202
R203
C201
C203
IC201
C202
C234
R230
IC203
R216
Q204
C235
C236
C220
C219
R233
L207
L208
CN203
R215
Q203
C218
R214
R232
R218
R219
CN202
L206
IC202
C233
R235
C232
R234
R231
C230
R228
C229
Q205
R229
R221
R224
R223
C227
R225
R226
R227
0 6 CCD PWB
YB20746-01-01

COMPONENT SIDE (A)

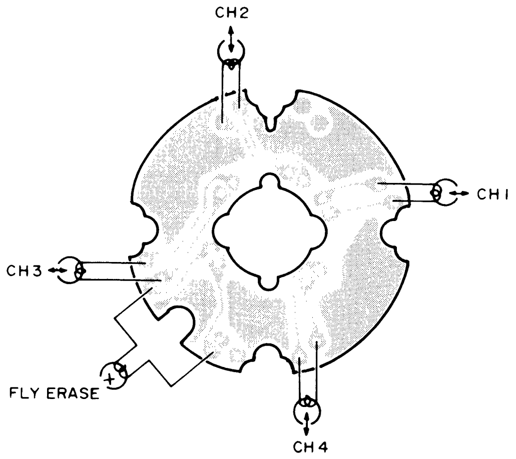

C
B
A
1
2
C211
C207
C210
C209
C212
C206
L202
L201
C214
L203
C213
D204
CN201
C221
L204
C231
C215
R212
C217
R220
C216
C223
C222
R217
C225
C224
R237
R236
L205
R213
C226
R238
R222
X201
C228
0 6 CCD PWB
YB20746-01-01

COMPONENT PARTS LOCATION GUIDE

REF.No.	LOCATION		
CAPACITOR			
C201	B	C	2B
C202	B	C	1B
C203	B	C	2B
C204	B	C	2B
C205	B	C	2B
C206	A	C	2B
C207	A	C	2C
C208	B	C	2C
C209	A	C	2C
C210	A	C	2C
C211	A	C	2C
C212	A	C	2B
C213	A	C	2B
C214	A	C	2B
C215	A	C	2A
C216	A	C	2A
C217	A	C	2A
C218	B	C	1B
C219	B	C	2B
C220	B	C	2B
C221	A	C	1B
C222	A	C	2A
C223	A	C	2A
C224	A	C	2A
C225	A	C	2A
C226	A	C	2A
C227	B	C	2A
C228	A	C	2A
C229	B	C	2A
C230	B	C	1A
C231	A	C	1A
C232	B	C	1A
C233	B	C	1A
C234	B	C	1B
C235	B	C	1B
C236	B	C	2B
DIODE			
D201	B	C	2B
D202	B	C	2C
D203	B	C	2B
D204	A	C	2B
IC			
IC201	B	C	2B
IC202	B	C	2A
IC203	B	C	2B
COIL			
L201	A	C	2B
L202	A	C	1B
L203	A	C	2B
L204	A	C	1B
L205	A	C	1A
L206	B	C	1A
L207	B	C	1B
L208	B	C	1B

REF.No.	LOCATION		
TRANSISTOR			
Q201	B	C	2B
Q202	B	C	2B
Q203	B	C	2B
Q204	B	C	1B
Q205	B	C	1A
RESISTOR			
R201	B	C	2B
R202	B	C	2B
R203	B	C	2B
R204	B	C	2B
R205	B	C	2B
R206	B	C	2C
R207	B	C	2C
R208	B	C	1B
R209	B	C	1B
R212	A	C	1A
R213	A	C	1A
R214	B	C	1B
R215	B	C	2B
R216	B	C	1B
R217	A	C	2A
R218	B	C	2A
R219	B	C	2A
R220	A	C	2A
R221	B	C	2A
R222	A	C	2A
R223	B	C	2A
R224	B	C	2A
R225	B	C	2A
R226	B	C	2A
R227	B	C	2A
R228	B	C	2A
R229	B	C	1A
R230	B	C	2B
R231	B	C	1A
R232	B	C	1B
R233	B	C	1B
R234	B	C	1A
R235	B	C	1A
R236	A	C	1A
R237	A	C	1A
R238	A	C	2A
CONNECTOR			
CN201	A	C	2B
CN202	B	C	1A
CN203	B	C	1B
TEST POINT			
TP201	B	C	2C

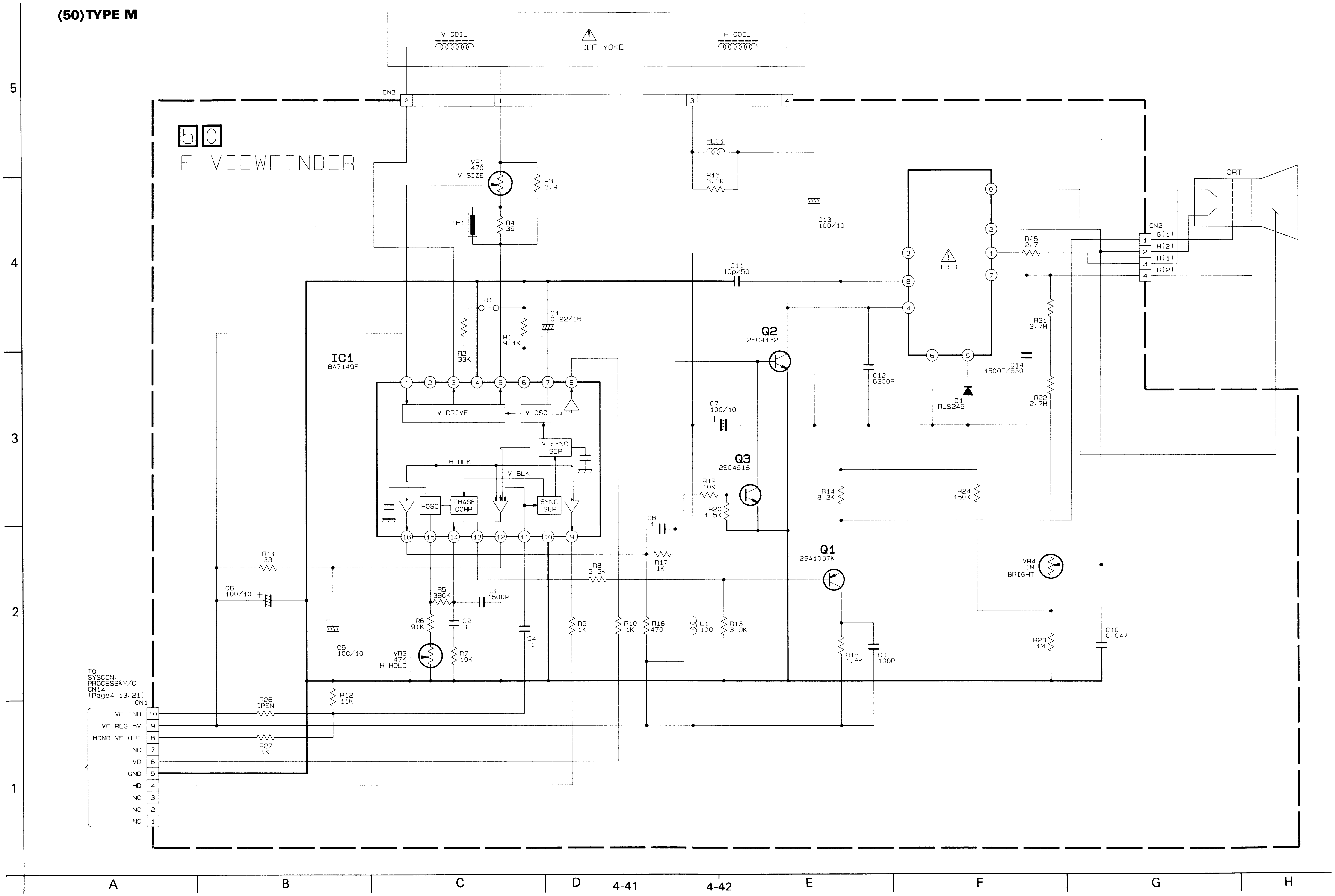
– UPPER DRUM –


CH2
CH1
CH3
FLY ERASE
CH4

4 0 UPPER DRUM PWB

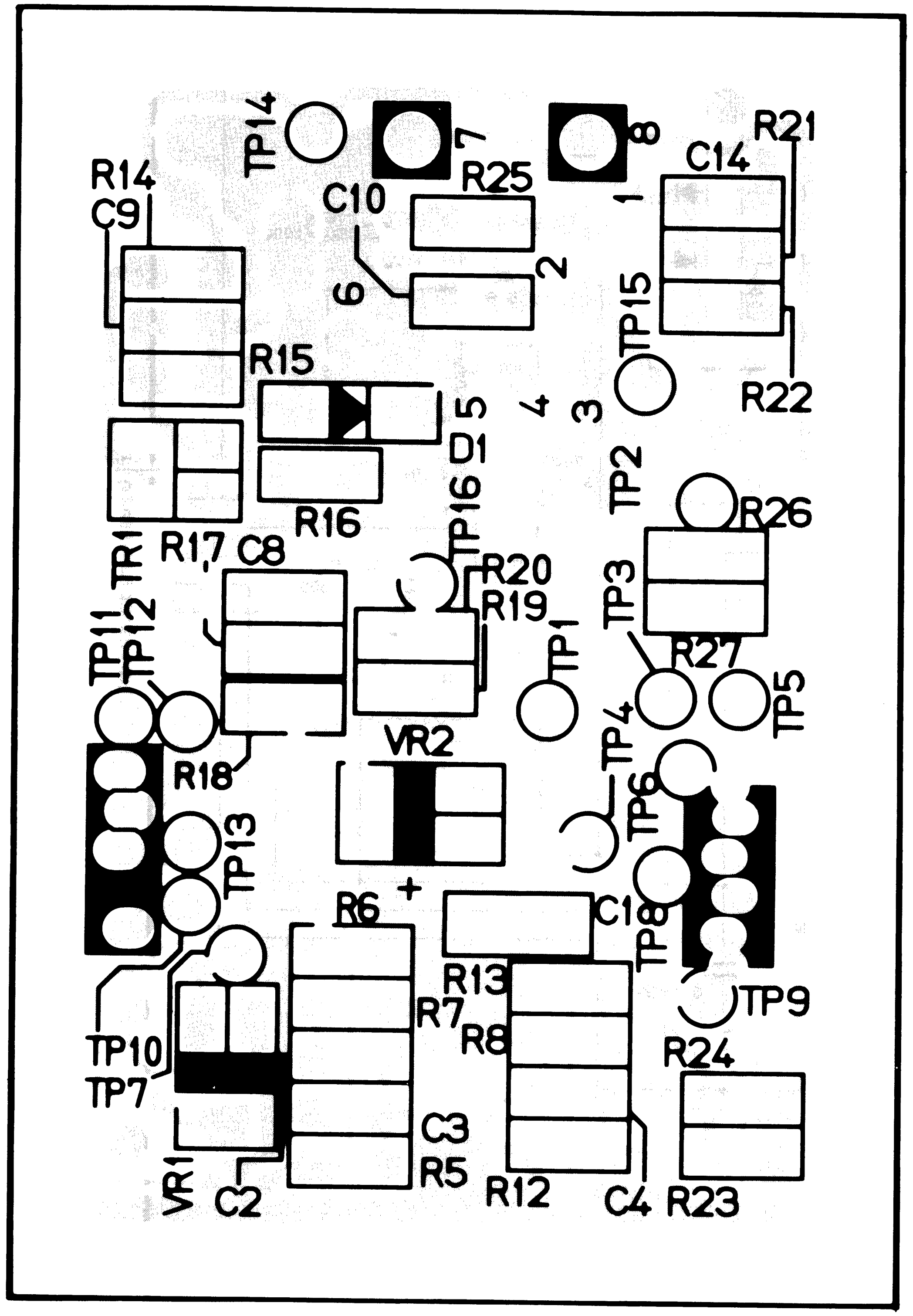
4.16 ELECTRONIC VIEWFINDER SCHEMATIC DIAGRAM (YQ32236C) [for AX260EG/AX460EG]

(50)TYPE M

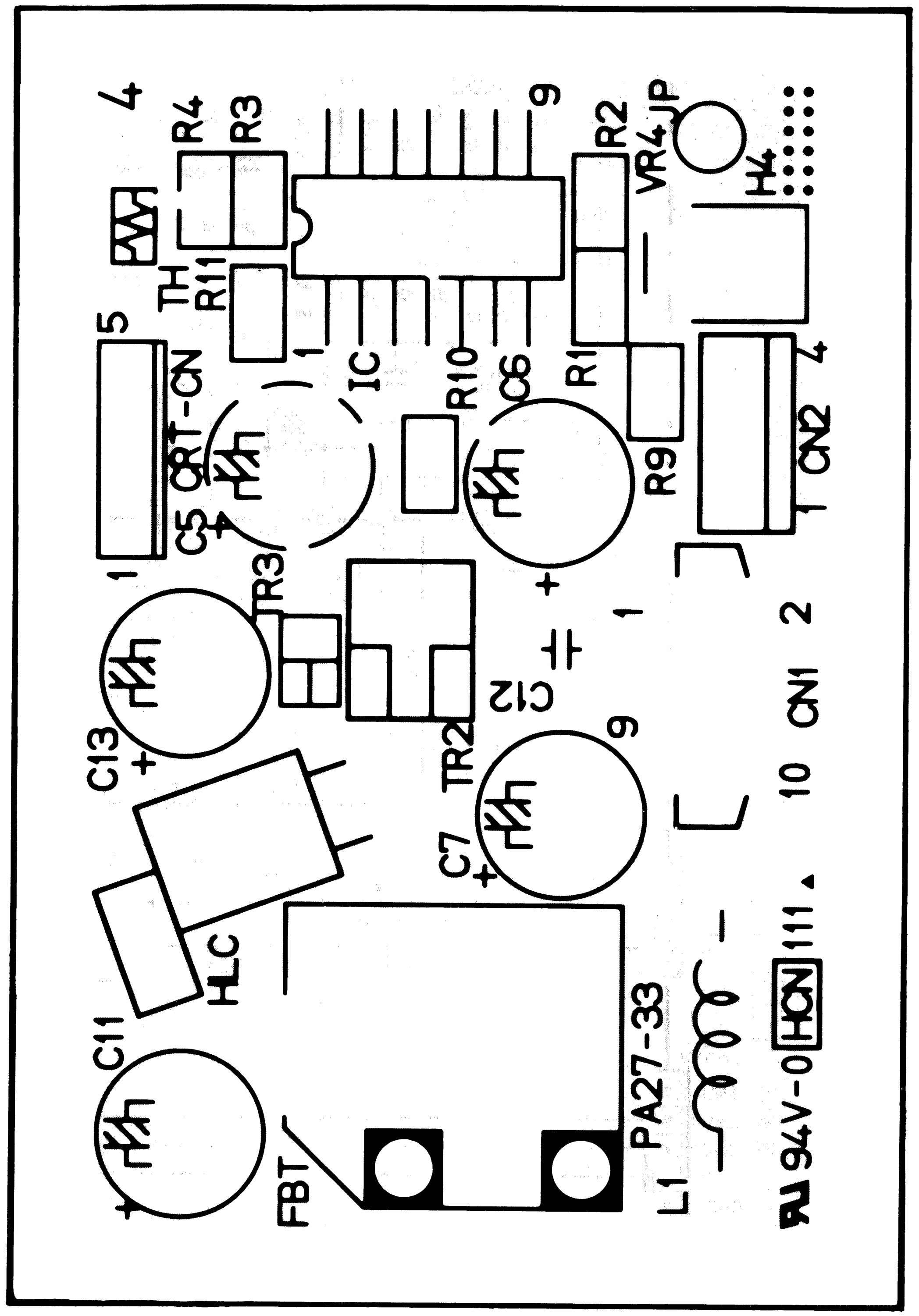

V-COIL
DEF YOKE
H-COIL
CN3
50
E VIEWFINDER
VR1
470
V SIZE
R3
3.9
TH1
R4
39
HLC1
R16
3.3K
C13
100/10
CRT
FBT1
CN2
G(1)
H(2)
H(1)
G(2)
R25
2.7
C11
10p/50
J1
C1
0.22/16
R1
9.1K
R2
33K
IC1
BA7149F
V DRIVE
V OSC
V SYNC SEP
H DLK
V BLK
HOSC
PHASE COMP
SYNC SEP
Q2
2SC4132
C12
6200P
D1
RLS245
C14
1500P/630
R21
2.7M
R22
2.7M
C7
100/10
Q3
2SC4618
R19
10K
R20
1.5K
C8
1
R17
1K
R14
8.2K
R24
150K
Q1
2SA1037K
VR4
1M
BRIGHT
R11
33
R8
2.2K
C6
100/10
R5
390K
C3
1500P
R6
91K
C2
1
C5
100/10
VR2
47K
H HOLD
R7
10K
C4
1
R9
1K
R10
1K
R18
470
L1
100
R13
3.9K
R15
1.8K
C9
100P
R23
1M
C10
0.047
R12
11K
R26
OPEN
R27
1K
TO SYSCON·PROCESS&Y/C CN14 (Page4-13.21)
CN1
VF IND 10
VF REG 5V 9
MONO VF OUT 8
NC 7
VD 6
GND 5
HD 4
NC 3
NC 2
NC 1
1
2
3
4
5
A
B
C
D
E
F
G
H

4.17 ELECTRONIC VIEWFINDER CIRCUIT BOARD (TYPE M) [for AX260EG/AX460EG]

FOIL SIDE (B)

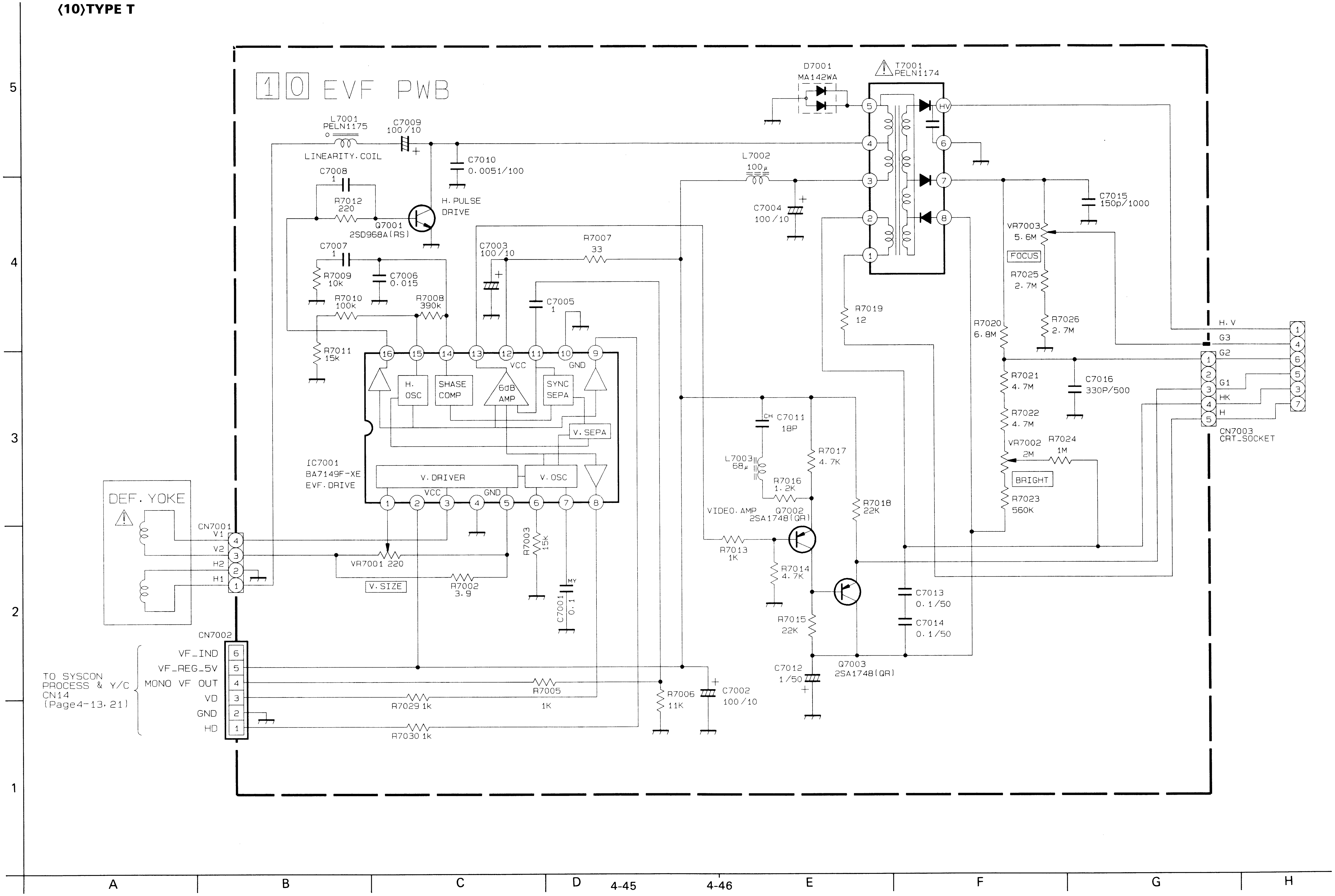

TP14
7
8
R21
C14
R25
R14
C9
C10
1
2
6
TP15
R15
5
4
3
D1
R22
R16
TP16
TP2
R26
TR1
R17
C8
R20
R19
TP3
TP11
TP12
TP1
R27
TP4
TP5
R18
VR2
TP6
TP13
R6
+
C1
TP8
R13
TP9
R7
R8
R24
TP10
TP7
C3
R5
R12
C4
R23
VR1
C2

COMPONENT SIDE (A)


4
R4
R3
9
R2
VR4
JP
H4
TH
R11
5
CRT-CN
1
IC
R10
C6
R1
4
CN2
R9
1
C5
TR3
1
2
C12
CN1
9
10
C13
TR2
C7
HLC
C11
FBT
PA27-33
L1
94V-0
HCN
111

4.18 ELECTRONIC VIEWFINDER SCHEMATIC DIAGRAM (YQ32237C) [for AX260EG/AX460EG]

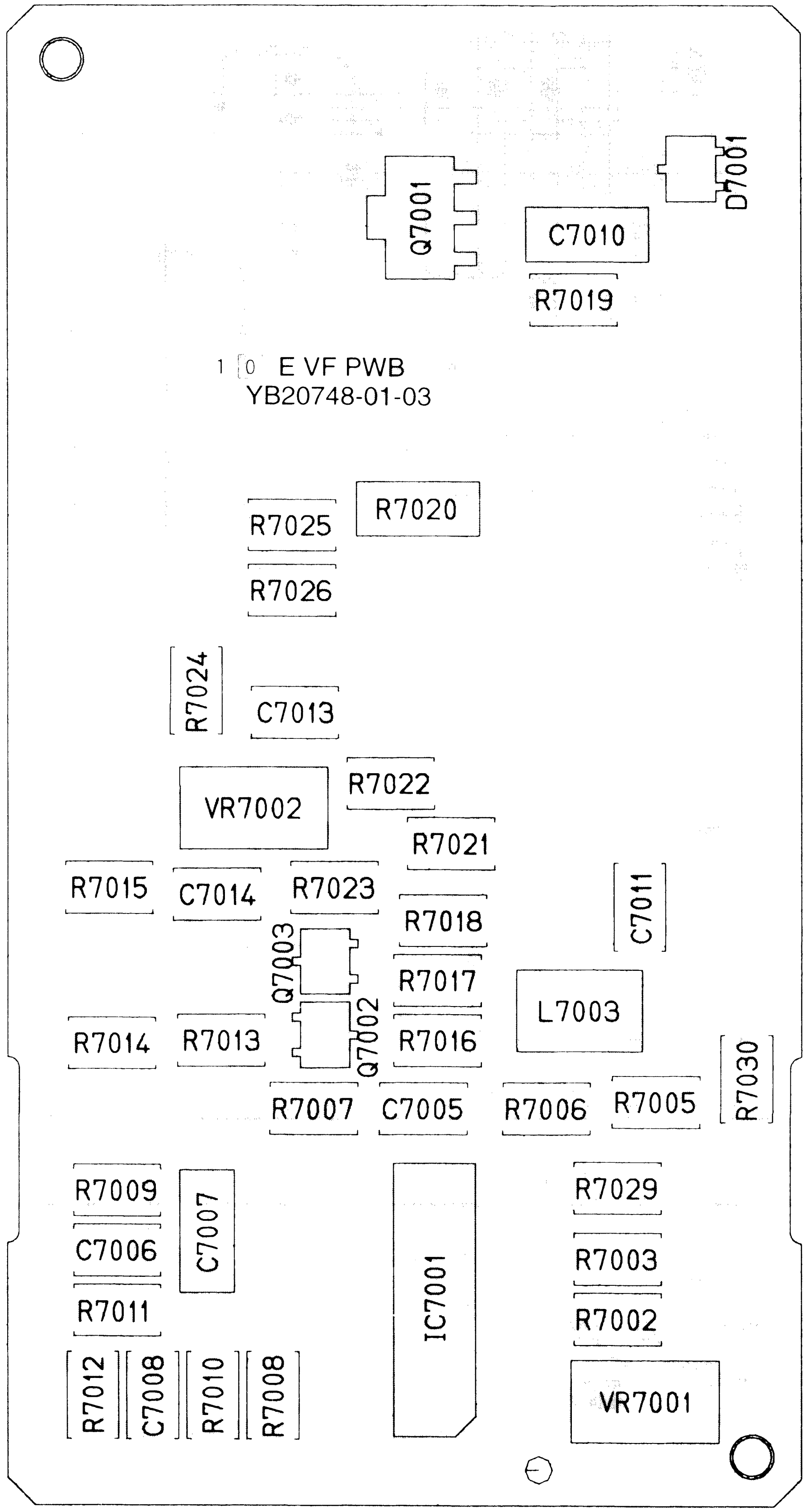
(10)TYPE T



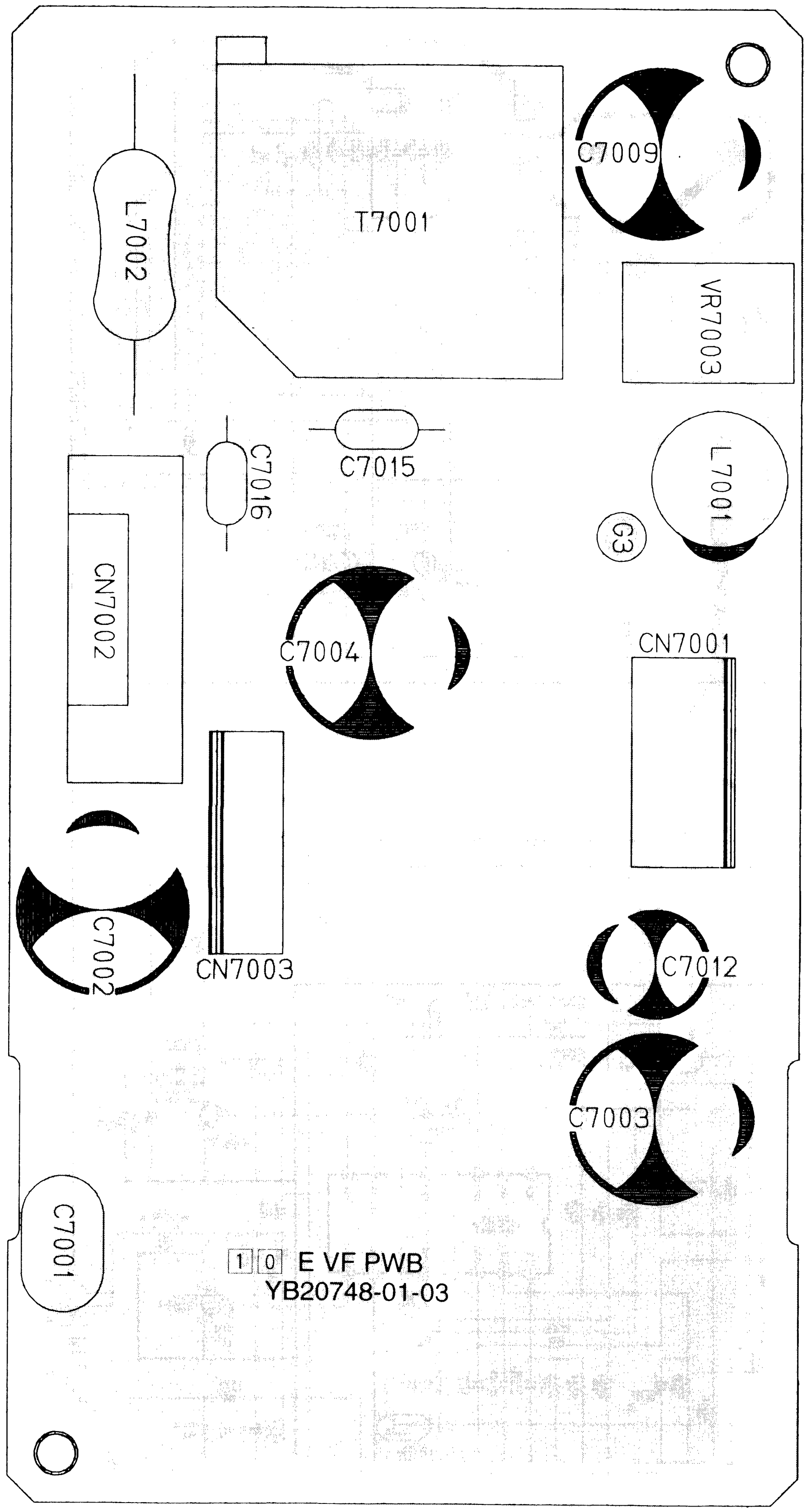
10 EVF PWB
L7001
PELN1175
LINEARITY. COIL
C7009
100/10
C7010
0.0051/100
C7008
1
R7012
220
Q7001
2SD968A(RS)
H. PULSE
DRIVE
C7007
1
R7009
10k
C7006
0.015
R7010
100k
R7008
390k
R7011
15k
C7003
100/10
R7007
33
C7005
1
VCC
GND
H. OSC
SHASE COMP
6dB AMP
SYNC SEPA
V. SEPA
IC7001
BA7149F-XE
EVF. DRIVE
V. DRIVER
V. OSC
VCC
GND
D7001
MA142WA
T7001
PELN1174
HV
L7002
100µ
C7004
100/10
C7015
150p/1000
VR7003
5.6M
FOCUS
R7025
2.7M
R7026
2.7M
R7019
12
R7020
6.8M
R7021
4.7M
R7022
4.7M
C7016
330P/500
VR7002
2M
R7024
1M
BRIGHT
R7023
560K
H. V
G3
G2
G1
HK
H
CN7003
CRT_SOCKET
C7011
18P
CH
L7003
68µ
R7017
4.7K
R7016
1.2K
R7018
22K
VIDEO. AMP
Q7002
2SA1748(QR)
R7013
1K
R7014
4.7K
R7015
22K
C7013
0.1/50
C7014
0.1/50
C7012
1/50
Q7003
2SA1748(QR)
DEF. YOKE
CN7001
V1
V2
H2
H1
VR7001 220
V. SIZE
R7002
3.9
R7003
15k
C7001
0.1
MY
CN7002
VF_IND
VF_REG_5V
MONO VF OUT
VD
GND
HD
TO SYSCON
PROCESS & Y/C
CN14
(Page4-13.21)
R7005
1K
R7029 1k
R7030 1k
R7006
11K
C7002
100/10
5
4
3
2
1
A
B
C
D
E
F
G
H

4.19 ELECTRONIC VIEWFINDER CIRCUIT BOARD (TYPE T) [for AX260EG/AX460EG]

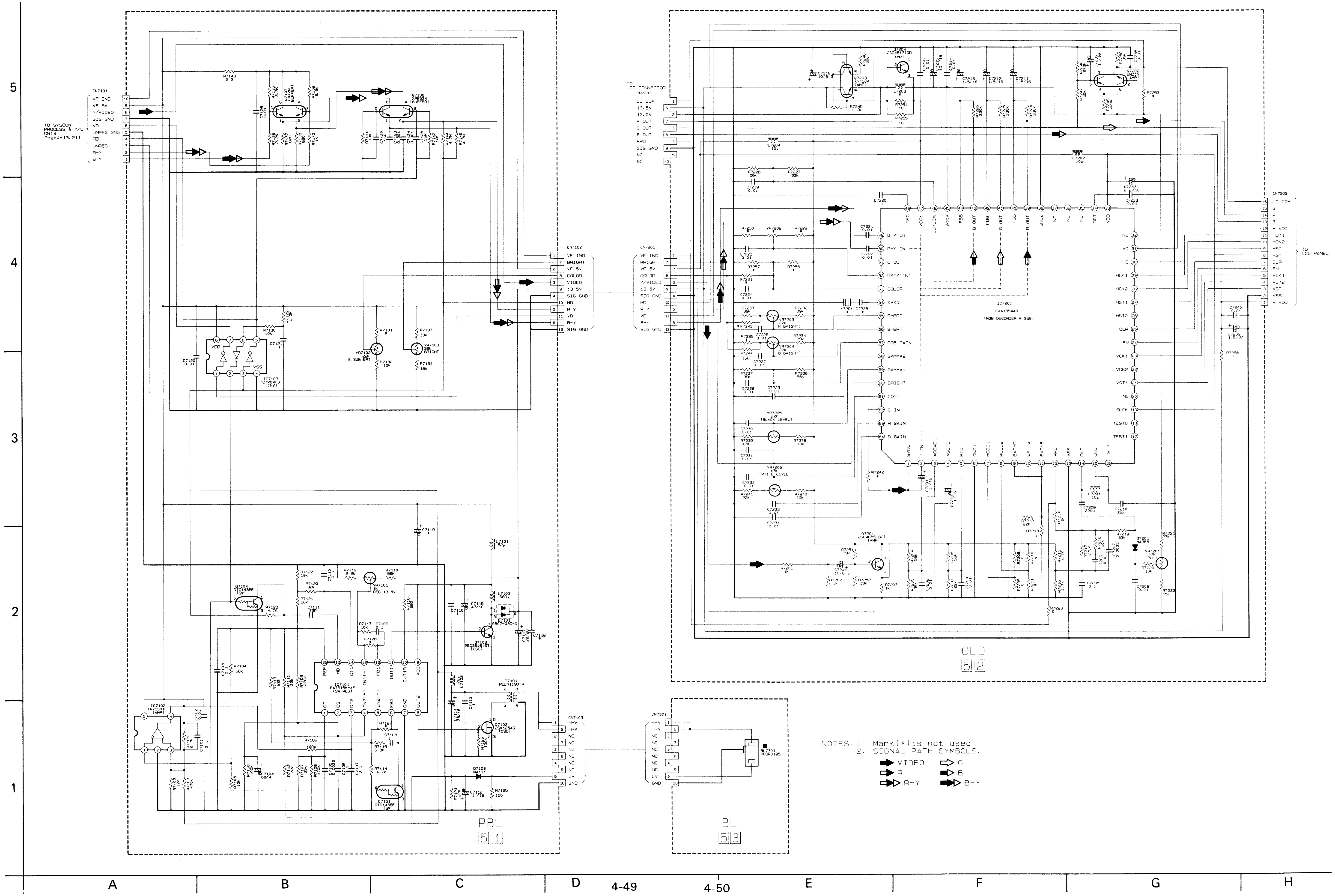
FOIL SIDE (B)


Q7001
D7001
C7010
R7019
1 0 E VF PWB
YB20748-01-03
R7025
R7020
R7026
R7024
C7013
VR7002
R7022
R7021
R7015
C7014
R7023
R7018
C7011
Q7003
R7017
L7003
R7014
R7013
Q7002
R7016
R7030
R7007
C7005
R7006
R7005
R7009
C7007
R7029
C7006
IC7001
R7003
R7011
R7002
R7012
C7008
R7010
R7008
VR7001

COMPONENT SIDE (A)


C7009
L7002
T7001
VR7003
C7016
C7015
L7001
G3
CN7002
C7004
CN7001
C7002
CN7003
C7012
C7003
C7001
1 0 E VF PWB
YB20748-01-03

4.20 ELECTRONIC VIEWFINDER SCHEMATIC DIAGRAM [for AX360EG]


CN7101
VF IND
VF 5V
Y/VIDEO
SIG GND
VD
UNREG GND
HD
UNREG
R-Y
B-Y
TO SYSCON PROCESS & Y/C CN14 (Page4-13.21)
Q7106 2SA1037AK (BUFFER)
Q7105 2SC2412K (BUFFER)
IC7103 TC7W04FU (INV)
VR7102 8.SUB BRT
VR7103 BRIGHT
CN7102
VF IND
BRIGHT
VF 5V
COLOR
VIDEO
13.5V
SIG GND
HD
R-Y
VD
B-Y
SIG GND
IC7101 FA7615P (SW REG)
IC7102 TA75S01F (AMP)
Q7104 DTC143EE (SW)
Q7101 DTC143EE (SW)
Q7103 2SC3646 (OSC)
Q7102 2SK1054S (OSC)
T7101 PELN1190-A
VR7101 REG 13.5V
CN7103
-HV
-HV
NC
NC
NC
NC
NC
NC
LV
GND
PBL
51
TO JIG CONNECTOR CN7203
LC COM
13.5V
12.0V
R OUT
G OUT
B OUT
RPD
SIG GND
NC
NC
CN7201
VF IND
BRIGHT
VF 5V
COLOR
Y/VIDEO
13.5V
SIG GND
HD
R-Y
VD
B-Y
SIG GND
IC7201 CXA1854AR (RGB DECORDER & SSG)
VR7202
VR7203 (R BRIGHT)
VR7204 (B BRIGHT)
VR7205 (BLACK LEVEL)
VR7206 (WHITE LEVEL)
Q7201 2SC4081 (BC) (AMP)
Q7202 UMZ1N (AMP)
Q7203 XN4504 (AMP)
Q7204 2SC4617 (QR) (AMP)
VR7201 (PLL)
D7201 MA365
CN7202
LC COM
G
R
B
H VDD
HCK1
HCK2
HST
RGT
CLR
EN
VCK1
VCK2
VST
VSS
V VDD
TO LCD PANEL
CLD
52
CN7301
BL7301 PEDP0195
BL
53
5
4
3
2
1
A
B
C
D
E
F
G
H

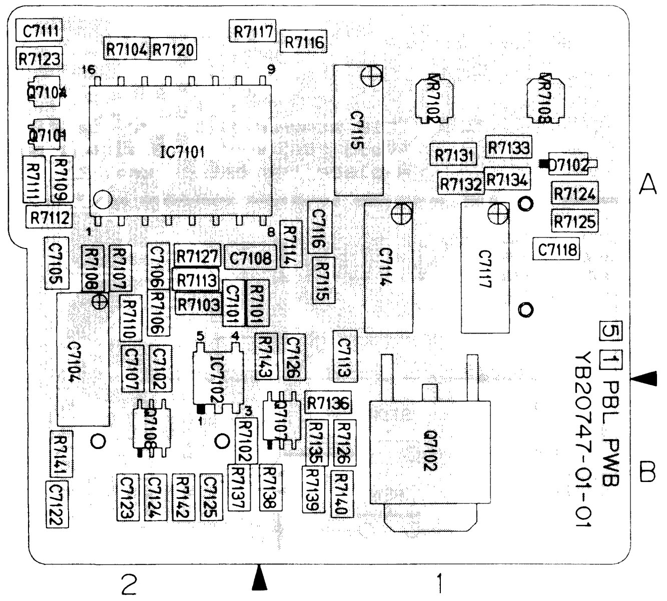
NOTES: 1. Mark(*) is not used.
2. SIGNAL PATH SYMBOLS.

➡ VIDEO ⇨ G
⇨ R ➡ B
⇨ R-Y ➡ B-Y

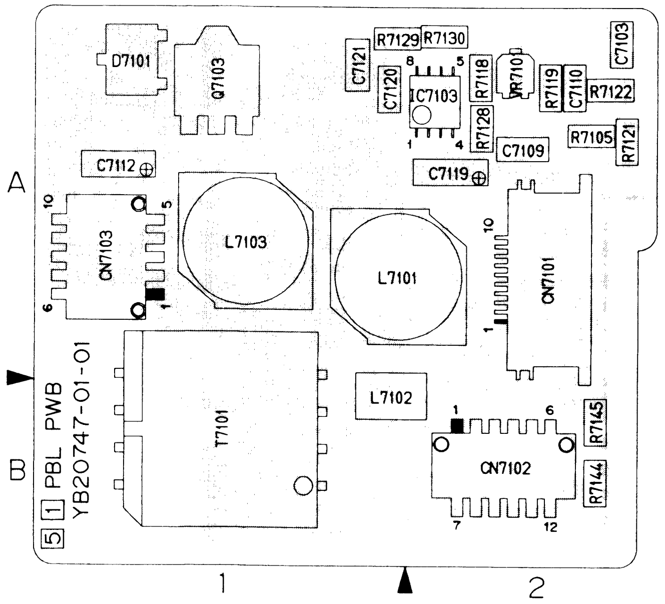
4.21 ELECTRONIC VIEWFINDER CIRCUIT BOARD [for AX360EG]

–PBL–

FOIL SIDE (B)

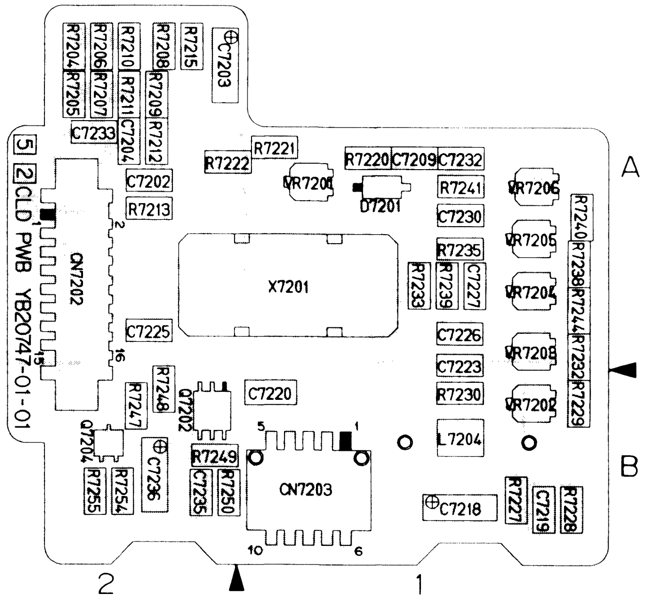

C7111
R7123
R7104
R7120
R7117
R7116
16
9
Q7104
Q7101
IC7101
C7115
VR7102
VR7103
R7111
R7109
R7112
R7131
R7133
D7102
R7132
R7134
R7124
R7125
A
1
8
C7116
C7114
C7117
C7118
C7105
R7108
R7107
C7106
R7127
C7108
R7114
R7115
R7113
R7103
C7101
R7101
R7106
R7110
C7104
C7107
C7102
5
4
IC7102
3
1
R7143
C7126
C7113
Q7108
Q7107
R7136
R7102
R7135
R7126
Q7102
R7141
C7122
C7123
C7124
R7142
C7125
R7137
R7138
R7139
R7140
5 1 PBL PWB
YB20747-01-01
B
2
1

COMPONENT SIDE (A)

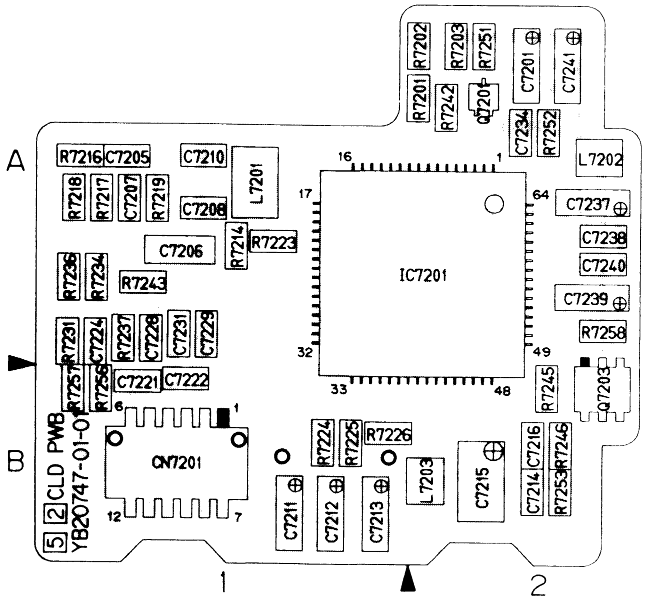

D7101
Q7103
C7121
R7129
R7130
C7120
8
5
IC7103
1
4
R7118
VR7101
R7119
C7110
R7122
C7103
R7128
C7109
R7105
R7121
C7112
C7119
A
10
5
CN7103
6
1
L7103
L7101
10
CN7101
1
T7101
L7102
1
6
CN7102
7
12
R7145
R7144
PBL PWB
YB20747-01-01
5 1
B
1
2

–CLD–

FOIL SIDE (B)

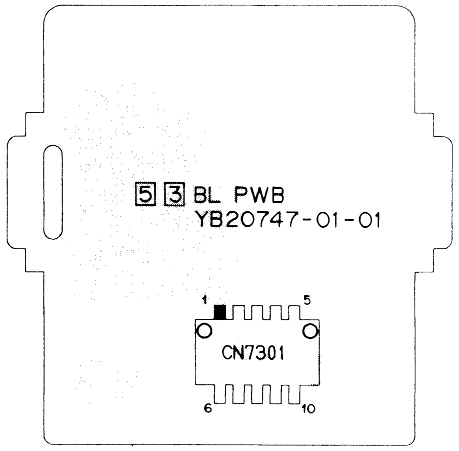

R7204
R7206
R7210
R7208
R7215
C7203
R7205
R7207
R7211
R7209
C7233
C7204
R7212
5 2 CLD PWB YB20747-01-01
R7222
R7221
R7220
C7209
C7232
VR7201
D7201
C7202
R7213
R7241
VR7206
C7230
R7240
1
2
CN7202
X7201
R7235
VR7205
R7233
R7239
C7227
R7238
VR7204
R7244
C7225
C7226
15
16
C7223
VR7203
R7232
R7248
R7247
Q7202
C7220
R7230
VR7202
R7229
Q7204
5
1
L7204
A
B
R7249
C7236
R7255
R7254
C7235
R7250
CN7203
C7218
R7227
C7219
R7228
10
6
2
1

COMPONENT SIDE (A)

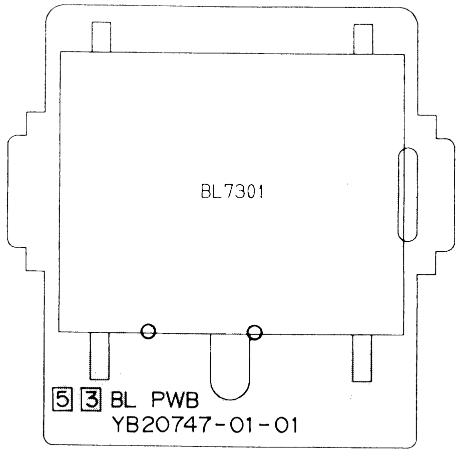

R7202
R7203
R7251
C7201
C7241
R7201
R7242
Q7201
C7234
R7252
L7202
A
R7216
C7205
C7210
L7201
16
1
R7218
R7217
C7207
R7219
C7208
17
64
C7237
C7238
R7214
R7223
C7206
IC7201
C7240
R7236
R7234
R7243
C7239
R7258
R7231
C7224
R7237
C7228
C7231
C7229
32
49
33
48
R7257
R7256
C7221
C7222
R7245
Q7203
6
1
CLD PWB
YB20747-01-01
5 2
CN7201
12
7
R7224
R7225
R7226
L7203
C7215
C7216
C7214
R7246
R7253
C7211
C7212
C7213
B
1
2

–BL–

FOIL SIDE (B)


5 3 BL PWB
YB20747-01-01
1
5
CN7301
6
10

COMPONENT SIDE (A)


BL7301
5 3 BL PWB
YB20747-01-01

PARTS LOCATION GUIDE <PBL BOARD>

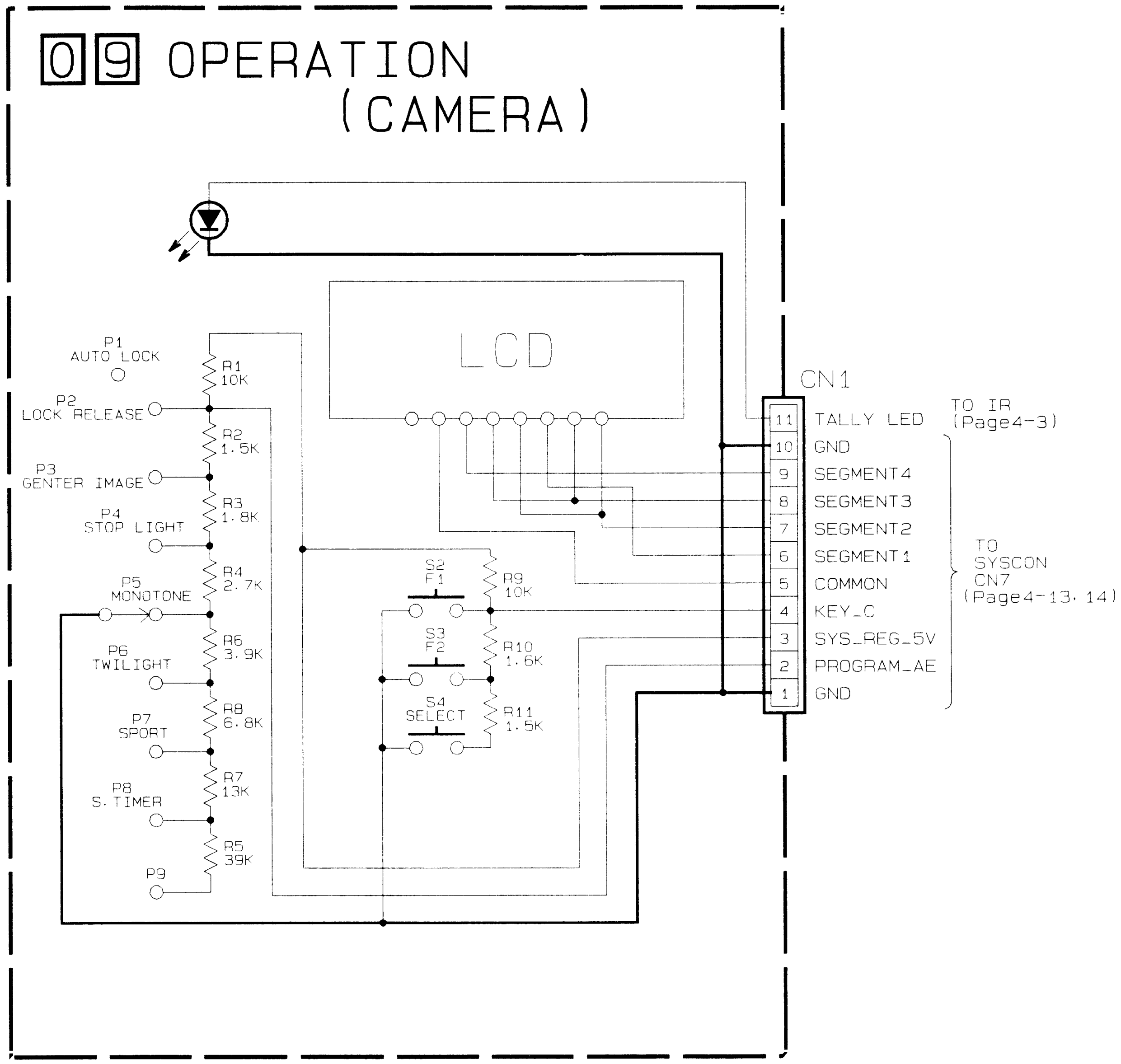
REF.No.	LOCATION		
CAPACITOR			
C7101	B	C	2A
C7102	B	C	2A
C7103	A	C	2A
C7104	B	C	2A
C7105	B	C	2A
C7106	B	C	2A
C7107	B	C	2A
C7108	B	C	2A
C7109	A	C	2A
C7110	A	C	2A
C7111	B	C	2A
C7112	A	C	1A
C7113	B	C	1A
C7114	B	C	1A
C7115	B	C	1A
C7116	B	C	1A
C7117	B	C	1A
C7118	B	C	1A
C7119	A	C	2A
C7120	A	C	1A
C7121	A	C	1A
C7122	B	C	2B
C7123	B	C	2B
C7124	B	C	2B
C7125	B	C	2B
C7126	B	C	1A
DIODE			
D7101	A	C	1A
D7102	B	C	1A
IC			
IC7101	B	C	2A
IC7102	B	C	2B
IC7103	A	C	2A
COIL			
L7101	A	C	1A
L7102	A	C	1B
L7103	A	C	1A
TRANSISTOR			
Q7101	B	C	2A
Q7102	B	C	1B
Q7103	A	C	1A
Q7104	B	C	2A
Q7107	B	C	1B
Q7108	B	C	2B
RESISTOR			
R7101	B	C	2A
R7102	B	C	2B
R7103	B	C	2A
R7104	B	C	2A
R7105	A	C	2A
R7106	B	C	2A
R7107	B	C	2A
R7108	B	C	2A
R7109	B	C	2A
R7110	B	C	2A
R7111	B	C	2A
R7112	B	C	2A
R7113	B	C	2A
R7114	B	C	1A
R7115	B	C	1A
R7116	B	C	1A
R7117	B	C	2A
R7118	A	C	2A
R7119	A	C	2A
R7120	B	C	2A
R7121	A	C	2A
R7122	A	C	2A
R7123	B	C	2A
R7124	B	C	1A
R7125	B	C	1A
R7126	B	C	1B
R7127	B	C	2A
R7128	A	C	2A
R7129	A	C	1A
R7130	A	C	2A
R7131	B	C	1A
R7132	B	C	1A
R7133	B	C	1A
R7134	B	C	1A
R7135	B	C	1B
R7136	B	C	1B
R7137	B	C	2B
R7138	B	C	1B
R7139	B	C	1B
R7140	B	C	1B
R7141	B	C	2B
R7142	B	C	2B
R7143	B	C	1A
R7144	A	C	2B
R7145	A	C	2B
VOLUM			
VR7101	A	C	2A
VR7102	B	C	1A
VR7103	B	C	1A
CONNECTOR			
CN7101	A	C	2A
CN7102	A	C	2B
CN7103	A	C	1A
TRANS			
T7101	A	C	1B

PARTS LOCATION GUIDE <CLD BOARD>

REF.No.	LOCATION		
CAPACITOR			
C7201	A	C	2A
C7202	B	C	2A
C7203	B	C	2A
C7204	B	C	2A
C7205	A	C	1A
C7206	A	C	1A
C7207	A	C	1A
C7208	A	C	1A
C7209	B	C	1A
C7210	A	C	1A
C7211	A	C	1B
C7212	A	C	1B
C7213	A	C	1B
C7214	A	C	2B
C7215	A	C	2B
C7216	A	C	2B
C7218	B	C	1B
C7219	B	C	1B
C7220	B	C	1B
C7221	A	C	1B
C7222	A	C	1B
C7223	B	C	1A
C7224	A	C	1A
C7225	B	C	2A
C7226	B	C	1A
C7227	B	C	1A
C7228	A	C	1A
C7229	A	C	1A
C7230	B	C	1A
C7231	A	C	1A
C7232	B	C	1A
C7233	B	C	2A
C7234	A	C	2A
C7235	B	C	2B
C7236	B	C	2B
C7237	A	C	2A
C7238	A	C	2A
C7239	A	C	2A
C7240	A	C	2A
C7241	A	C	2A
DIODE			
D7201	B	C	1A
IC			
IC7201	A	C	2A
COIL			
L7201	A	C	1A
L7202	A	C	2A
L7203	A	C	2B
L7204	B	C	1B
TRANSISTOR			
Q7201	A	C	2A
Q7202	B	C	2B
Q7203	A	C	2B
Q7204	B	C	2B
RESISTOR			
R7201	A	C	2A
R7202	A	C	2A
R7203	A	C	2A
R7204	B	C	2A
R7205	B	C	2A
R7206	B	C	2A
R7207	B	C	2A
R7208	B	C	2A
R7209	B	C	2A
R7210	B	C	2A
R7211	B	C	2A
R7212	B	C	2A
R7213	B	C	2A
R7214	A	C	1A
R7215	B	C	2A
R7216	A	C	1A
R7217	A	C	1A
R7218	A	C	1A
R7219	A	C	1A
R7220	B	C	1A
R7221	B	C	1A
R7222	B	C	2A
R7223	A	C	1A
R7224	A	C	1B
R7225	A	C	1B
R7226	A	C	1B
R7227	B	C	1B
R7228	B	C	1B
R7229	B	C	1B
R7230	B	C	1B
R7231	A	C	1A
R7232	B	C	1A
R7233	B	C	1A
R7234	A	C	1A
R7235	B	C	1A
R7236	A	C	1A
R7237	A	C	1A
R7238	B	C	1A
R7239	B	C	1A
R7240	B	C	1A
R7241	B	C	1A
R7242	A	C	2A
R7243	A	C	1A
R7244	B	C	1A
R7245	A	C	2B
R7246	A	C	2B
R7247	B	C	2B
R7248	B	C	2B
R7249	B	C	2B
R7250	B	C	2B
R7251	A	C	2A
R7252	A	C	2A
R7253	A	C	2B
R7254	B	C	2B
R7255	B	C	2B
R7256	A	C	1B
R7257	A	C	1B
R7258	A	C	2A
VOLUM			
VR7201	B	C	1A
VR7202	B	C	1B
VR7203	B	C	1A
VR7204	B	C	1A
VR7205	B	C	1A
VR7206	B	C	1A
CONNECTOR			
CN7201	A	C	1B
CN7202	B	C	2A
CN7203	B	C	1B
RESONATOR			
X7201	B	C	1A

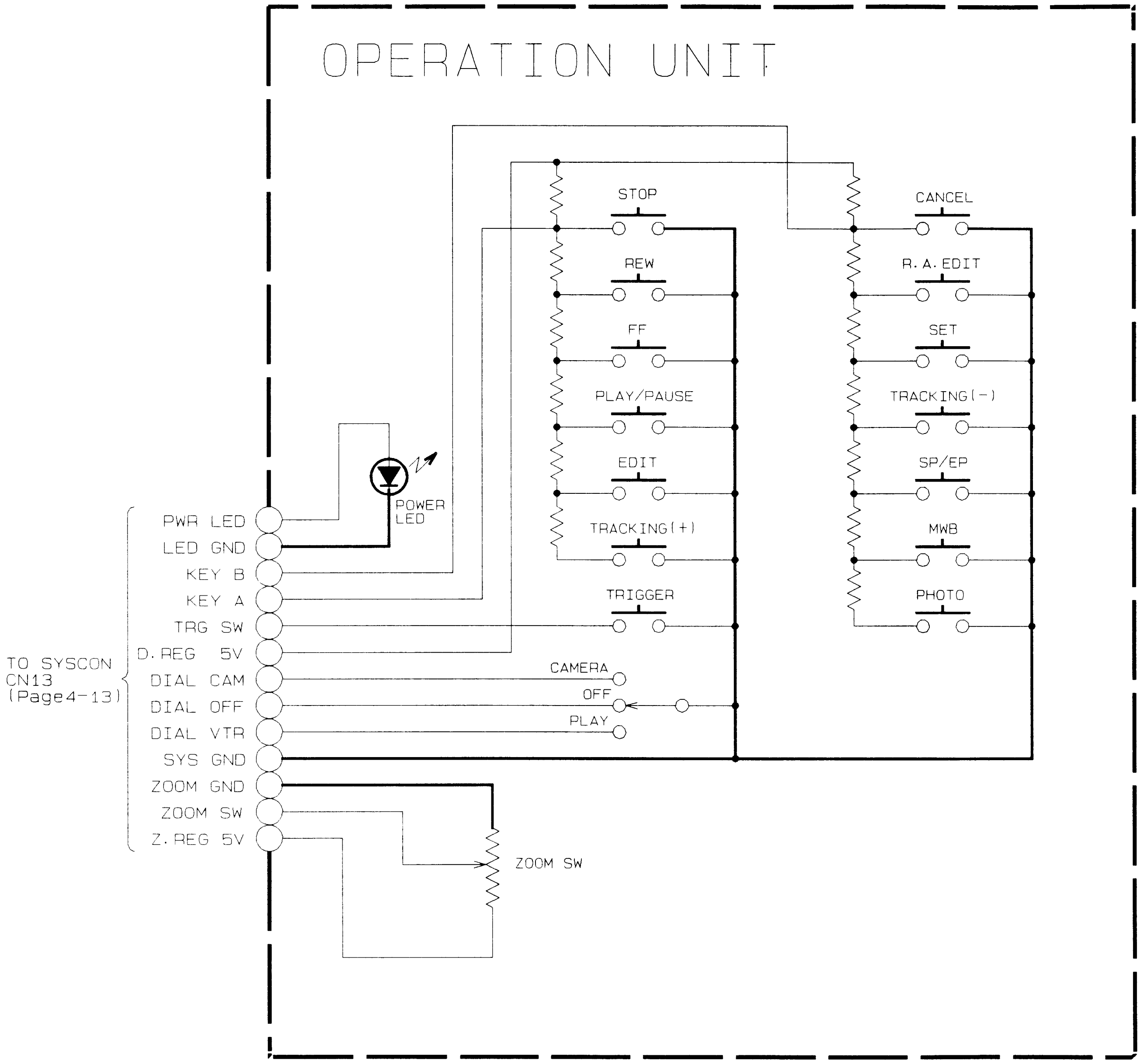
4.22 OPERATION (CAMERA) AND OPERATION UNIT SCHEMATIC DIAGRAMS

NOTE: This schematic diagram is only for reference.
Avoid replacing individual parts.
Replace the entire unit only.



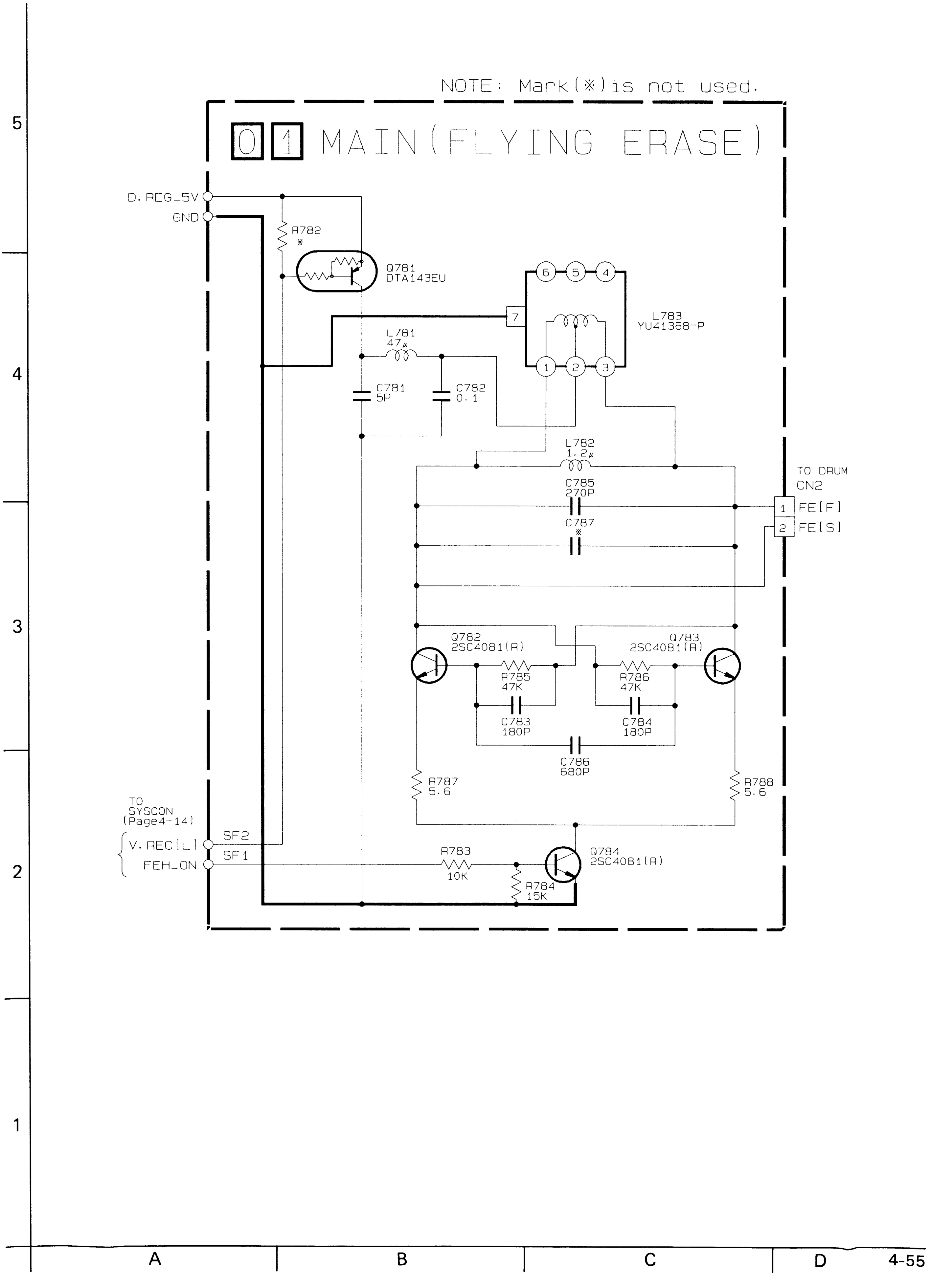
09 OPERATION (CAMERA)
LCD
CN1
11 TALLY LED
10 GND
9 SEGMENT4
8 SEGMENT3
7 SEGMENT2
6 SEGMENT1
5 COMMON
4 KEY_C
3 SYS_REG_5V
2 PROGRAM_AE
1 GND
TO IR (Page4-3)
TO SYSCON CN7 (Page4-13, 14)
P1 AUTO LOCK
P2 LOCK RELEASE
P3 GENTER IMAGE
P4 STOP LIGHT
P5 MONOTONE
P6 TWILIGHT
P7 SPORT
P8 S.TIMER
P9
R1 10K
R2 1.5K
R3 1.8K
R4 2.7K
R6 3.9K
R8 6.8K
R7 13K
R5 39K
S2 F1
S3 F2
S4 SELECT
R9 10K
R10 1.6K
R11 1.5K

NOTE: This schematic diagram is only for reference.
Avoid replacing individual parts.
Replace the entire unit only.



OPERATION UNIT
STOP
REW
FF
PLAY/PAUSE
EDIT
TRACKING(+)
TRIGGER
CANCEL
R.A.EDIT
SET
TRACKING(-)
SP/EP
MWB
PHOTO
POWER LED
CAMERA
OFF
PLAY
ZOOM SW
PWR LED
LED GND
KEY B
KEY A
TRG SW
D.REG 5V
DIAL CAM
DIAL OFF
DIAL VTR
SYS GND
ZOOM GND
ZOOM SW
Z.REG 5V
TO SYSCON CN13 (Page4-13)

4.23 FLYING ERASE SCHEMATIC DIAGRAM


NOTE: Mark(※)is not used.
01 MAIN(FLYING ERASE)
D.REG_5V
GND
R782
※
Q781
DTA143EU
L783
YU41368-P
6
5
4
7
1
2
3
L781
47μ
C781
5P
C782
0.1
L782
1.2μ
TO DRUM
CN2
C785
270P
1
FE[F]
2
FE[S]
C787
※
Q782
2SC4081(R)
Q783
2SC4081(R)
R785
47K
R786
47K
C783
180P
C784
180P
C786
680P
R787
5.6
R788
5.6
TO
SYSCON
(Page4-14)
SF2
V.REC[L]
SF1
FEH_ON
R783
10K
R784
15K
Q784
2SC4081(R)
5
4
3
2
1
A
B
C
D

4.24 VOLTAGE CHARTS

<SYSCON>

MODE / PIN	REC	PLAY
IC1		
1	4.9	4.9
2	1.5	1.5
3	1.8	1.8
4	4.9	4.9
5	5.0	5.0
6	0	0
7	4.9	4.9
8	0	0
9	2.4	2.4
10	3.0	3.0
11	4.5	4.5
12	2.5	2.5
13	0	0
14	5.0	5.0
15	0	0
16	4.9	4.9
17	5.0	5.0
18	0	0
19	0	4.9
20	0.5	0
21	0.5	0.5
22	2.9	2.9
23	0	4.9
24	0.5	0.5
25	2.4	2.4
26	2.4	2.4
27	0	0
28	2.4	2.4
29	2.4	2.4
30	0	4.9
31	0	4.9
32	0	0
33	0	0
34	0	0
35	0	4.9
36	4.9	0
37	4.9	0
38	4.9	4.9
39	4.9	0
40	0	0
41	0	0
42	0	0
43	4.9	4.9
44	0	0
45	4.9	4.9
46	4.9	4.9
47	0	0
48	0	0
49	4.9	4.9
50	4.5	2.1
51	4.9	2.0
52	0	0
53	0	0
54	0.7	0.7
55	0.8	0.7
56	4.9	4.4
57	4.9	4.7
58	0	0
59	0	0
60	2.4	2.4
61	0	0
62	4.9	4.9
63	4.9	4.9
64	4.9	4.9
65	4.9	4.9
66	0	4.9
67	4.9	4.9
68	4.9	0
69	3.6	3.6
70	0	4.9
71	0	0
72	0	0
73	0	4.9
74	0	4.9
75	4.9	0
76	0	0
77	0	0
78	4.0	4.0
79	5.0	5.0
80	4.8	4.8
81	0	0
82	-	-
83	0	0
84	4.9	4.9
85	3.1	3.1
86	0	0.4
87	4.9	4.9
88	4.9	4.9
89	0	-
90	2.4	2.4
91	2.4	2.4
92	2.4	2.4
93	0	0
94	2.6	2.5
95	2.2	2.4
96	2.4	2.4
97	2.4	2.4
98	2.4	2.4
99	0	0
100	2.4	0
101	2.0	0
102	0	0
103	0	0
104	4.9	4.9
105	4.9	4.9
106	0	0
107	-	-
108	-	-
109	2.5	2.4
110	4.4	0
111	0	0
112	0	0
113	3.5	3.6
114	2.6	2.5
115	2.4	2.4
116	4.9	4.9
117	4.9	4.9
118	4.9	4.9
119	4.8	4.9
120	4.8	4.9
121	4.8	4.8
122	4.8	4.8
123	0.4	0.4
124	2.5	2.4
125	0	0
126	0	0
127	0	0
128	0	0
IC2		
1	4.8	4.8
2	3.7	3.6
3	4.0	4.0
4	4.9	4.9
5	4.9	4.9
6	0	0
7	1.7	1.7
8	1.7	1.7
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	4.5	4.5
20	4.3	4.3
IC4		
1	0	0
2	5.0	5.0
3	0.4	0.4
4	5.0	5.0
5	5.0	5.0
6	0	0
7	0	0
8	-	-
9	-	-
10	-	-
11	-	-
12	0	0
13	0	5.0
14	0	5.0
IC5		
1	0	0
2	0	0
3	0	0
4	4.9	4.9
5	4.9	4.9
6	4.9	4.9
7	6.9	6.9
8	5.0	5.0
IC6		
1	0.4	0
2	0	7.0
3	4.9	4.9
4	0	0
5	0	0
6	4.0	4.0
7	0	0
8	0	0
Q1		
E	5.0	5.0
C	0	0
B	5.0	5.0
Q2		
E	0	0
C	0	0
B	4.9	0
Q3		
E	4.9	4.9
C	4.9	4.9
B	0	0
Q5		
E	4.9	4.9
C	4.8	0
B	0	4.9
Q6		
E	0	0
C	6.9	7.0
B	0	0
Q7		
E	6.9	6.9
C	0	-0.4
B	6.9	6.9
Q201		
E	0	0
C	0	0
B	0	3.9
Q202		
E	0	0
C	0	0
B	0.6	0
Q203		
E	4.9	4.9
C	4.8	0.4
B	0	4.9

<MDA>

MODE / PIN	REC	PLAY
IC301		
1	4.9	4.9
2	0	0
3	0	2.4
4	2.4	2.4
5	2.4	2.4
6	1.8	1.8
7	1.2	1.2
8	3.6	3.7
9	1.1	1.1
10	4.9	4.9
11	0.6	0.6
12	1.5	1.5
13	2.4	2.4
14	1.7	1.7
15	0	0
16	1.7	1.7
17	6.8	6.9
18	1.7	1.7
19	0	2.2
20	2.1	2.1
21	0	0.7
22	0.7	0.7
23	3.6	3.6
24	3.6	3.6
25	4.2	4.3
26	2.4	2.4
27	2.4	2.4
28	2.4	2.4
29	0	0
30	0	0
IC351		
1	0	0
2	2.3	2.3
3	2.1	2.1
4	1.2	1.2
5	0	0
6	1.5	1.5
7	1.1	1.1
8	0.4	0.4
9	3.9	3.9
10	0.6	0.5
11	0	0
12	0	0
13	0	0
14	4.9	4.9
15	2.4	2.4
16	2.4	2.4
17	2.4	2.4
18	4.1	4.1
19	0	0
20	0	2.4
21	2.4	2.4
22	2.4	2.4
23	2.4	2.4
24	2.4	2.4
25	2.4	2.4
26	1.7	1.6
27	1.7	1.6
28	1.7	1.6
29	0.7	0.8
30	0.7	0.8
31	0.7	0.8
32	0	0
Q351		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0.8	0.7
9	1.7	1.6
10	0.8	0.7
11	1.7	1.6
12	0.8	0.7
13	1.7	1.6
14	2.2	2.1

<AUDIO>

MODE / PIN	REC	PLAY
IC401		
1	1.7	1.7
2	0	2.3
3	0	2.3
4	2.3	2.3
5	2.3	2.3
6	2.3	2.3
7	0	0
8	1.6	1.6
9	0	0
10	2.3	2.3
11	0.8	0
12	0	4.9
13	2.3	0
14	4.2	0
15	2.3	2.3
16	0	0
17	0	0
18	0	0
19	1.7	1.7
20	0	0
21	1.7	1.7
22	4.6	4.6
23	1.7	1.7
24	4.7	4.7
IC402		
1	2.3	2.3
2	2.3	2.3
3	2.3	2.3
4	0	0
5	0	0
6	4.4	4.3
7	4.4	4.3
8	4.7	4.7
Q401		
E	4.4	4.9
C	4.2	0
B	0	4.9
Q402		
E	4.9	4.9
C	4.9	4.9
B	0	4.9
Q403		
1	-16.6	0.6
2	-10.2	0
3	-16.3	0.6
4	0	0
5	0	0
Q404		
E	4.7	4.7
C	-16.3	4.6
B	4.7	0
Q405		
E	0	0
C	4.6	0
B	0	4.9
Q408		
E	0	0
C	0	0
B	0	0

<PROCESS&Y/C>

MODE / PIN	REC	PLAY
IC501		
1	1.8	0
2	2.4	1.0
3	1.9	3.8
4	3.0	3.6
5	1.8	1.9
6	2.2	3.9
7	0	0
8	1.9	1.1
9	2.7	2.8
10	1.7	1.8
11	1.7	1.8
12	4.7	4.8
13	2.6	2.4
14	2.2	0
15	1.9	1.8
16	2.4	1.4
17	1.9	0.5
18	2.0	2.1
19	2.0	2.1
20	4.8	4.8
21	0	2.5
22	2.1	2.1
23	2.0	2.0
24	0	0
25	0	0
26	2.3	2.2
27	2.2	2.1
28	1.9	2.1
29	0	2.1
30	0	2.7
31	2.3	2.2
32	1.5	2.8
33	0	1.2
34	0	2.6
35	0	2.5
36	2.1	2.2
37	2.4	2.9
38	0	1.5
39	3.2	3.9
40	4.8	4.8
41	0.9	0.9
42	2.5	2.3
43	0	0
44	4.9	4.9
45	0	0
46	0	0
47	2.5	2.5
48	2.4	2.4
49	0	0
50	2.1	3.2
51	4.9	4.9
52	0	0
53	0	0

MODE / PIN	REC	PLAY
54	2.3	2.3
55	0	0
56	3.5	4.1
57	2.8	2.6
58	4.8	4.8
59	2.2	2.9
60	2.9	2.9
61	2.3	2.3
62	3.0	3.1
63	0.9	0.9
64	2.9	2.9
65	1.7	1.6
66	3.1	3.1
67	0.9	2.3
68	0	2.4
69	3.2	3.2
70	2.0	1.9
71	2.0	2.0
72	4.8	4.8
73	2.0	2.0
74	2.7	2.7
75	2.5	2.0
76	0	0
77	2.7	2.7
78	3.4	3.4
79	2.4	2.5
80	2.3	2.5
81	1.8	1.8
82	1.7	1.8
83	0	0
84	0	0
85	0	0
86	3.4	3.4
87	3.2	0.9
88	2.0	0.9
89	2.0	0.9
90	2.2	0.9
91	2.4	1.0
92	0.6	0.8
93	4.7	4.8
94	2.0	3.4
95	1.7	1.8
96	2.1	3.4
97	3.1	0
98	3.0	0
99	1.7	0
100	1.8	0
101	2.4	1.0
102	2.4	0
103	1.8	0
104	1.8	0.4
105	1.8	0
106	1.8	0
107	1.5	1.6
108	1.5	1.6
109	3.1	1.6
110	2.3	0
111	2.3	3.3
112	3.0	3.3
113	0.8	0
114	0.8	1.0
115	0	0
116	1.9	0
117	1.7	1.8
118	3.3	3.0
119	2.1	1.8
120	2.1	0
121	2.2	2.3
122	2.2	2.3
123	1.8	0
124	1.9	0
125	3.3	0
126	1.9	1.7
127	3.0	0
128	1.9	1.0
IC502		
1	4.2	2.1
2	0	0
3	4.4	2.1
4	3.2	3.2
5	3.2	3.2
6	0	0
7	2.0	2.0
8	4.1	4.1
9	2.8	2.8
10	0	2.8
11	0	2.3
12	0.9	2.3
13	3.4	3.4
14	3.2	3.2
15	4.8	4.8
16	3.6	3.5
IC503		
1	2.0	2.0
2	0	0
3	4.8	4.8
4	2.9	2.9
5	0	0
6	2.9	2.9
7	1.6	1.6
8	2.2	2.3
9	4.8	4.8
10	0	0
11	2.2	2.3
12	2.4	2.4
13	2.9	2.9
14	4.9	0
15	2.7	2.9
16	4.8	4.8
17	0	0
18	0	0
19	0	2.5
20	2.0	2.0
Q503		
E	2.4	2.4
C	4.8	4.8
B	3.0	3.0
Q504		
E	1.7	1.7
C	0	0
B	1.1	1.1
Q505		
E	2.8	2.8
C	0	0
B	2.2	2.3
Q506		
E	2.8	2.8
C	0	0
B	2.2	2.3
Q507		
E	0	0
C	0	0
B	0	0
Q509		
E	2.8	2.9
C	4.8	4.8
B	3.4	3.5
Q701		
E	3.5	1.5
C	4.8	4.8
B	4.2	2.1
Q704		
E	3.6	1.2
C	4.8	4.8
B	4.2	1.8
Q706		
E	0	0
C	0	2.9
B	4.9	0
Q810		
E	1.8	0.4
C	0	0
B	1.2	0
Q811		
E	1.8	0.4
C	0	0
B	1.2	0

<PRE/REC>

MODE / PIN	REC	PLAY
IC601		
1	4.6	0
2	2.7	1.7
3	0.5	1.0
4	1.2	1.1
5	0	4.9
6	2.7	1.2
7	4.2	1.8
8	1.4	0
9	1.7	2.7
10	0	2.5
11	2.5	2.5
12	3.1	3.1
13	0	0
14	0	0
15	2.3	2.3
16	2.5	2.5
17	0	0
18	0	0
19	0	0
20	3.9	0
21	3.4	0.4
22	0	0
23	0	0.6
24	0	0.8
25	0	0
26	3.9	0
27	3.4	0.5
28	3.9	0
29	0	0.6
30	0	0.8
31	0	0
32	0	0
33	0	0.8
34	0	0.6
35	3.9	0
36	0	0.4
37	0	0
38	0	0
39	0	0.8
40	0	0.6
41	4.0	0
42	3.4	0.4
43	3.9	0
44	0	0
45	4.8	4.8
46	4.8	4.8
47	2.3	4.2
48	3.6	1.8
Q601		
E	3.9	0
C	3.9	0
B	3.4	0.4
Q602		
E	3.9	0
C	3.9	0
B	3.4	0.4
Q603		
E	3.9	0
C	3.9	0
B	3.4	0.5
Q604		
E	3.9	0
C	3.9	0
B	3.4	0.4
Q605		
E	4.2	2.2
C	0	0
B	3.5	1.8
Q606		
E	1.2	1.2
C	3.4	3.4
B	1.9	1.9

<FLYING ERASE>

MODE / PIN	REC	PLAY
Q781		
E	4.9	0
C	4.7	0
B	0	4.9
Q782		
E	0	0.4
C	-0.4	0
B	0.6	0
Q783		
E	0	0.4
C	0	0
B	0.5	0
Q784		
E	0	0
C	0	0.4
B	0.7	0

<AF/CPU>

MODE / PIN	REC	PLAY
IC801		
1	1.8	1.0
2	1.7	1.3
3	4.9	0.5
4	3.2	1.2
5	1.5	1.3
6	0	0
7	0	0
8	0	0
9	2.5	0
10	2.5	0
11	2.5	0
12	0	0
13	0	0
14	0	0
15	1.8	1.3
16	4.6	1.0
IC802		
1	1.9	1.0
2	1.7	1.7
3	1.8	1.8
4	4.9	0.4
5	1.7	1.8
6	1.7	1.7
7	1.4	1.0
8	1.7	1.3
9	1.7	1.7
10	1.7	0
11	0	0
12	1.7	0
13	1.7	1.7
14	1.5	1.3
IC803		
1	1.7	0
2	0	0
3	1.7	1.3
4	0	0
5	1.7	1.3
6	1.7	0
7	1.7	0
8	4.9	0.4
IC901		
1	1.5	1.0
2	1.8	1.3
3	3.2	1.3
4	0	0
5	3.5	0
6	3.1	0
7	4.9	4.9
8	5.0	5.0
9	-	0
10	5.0	5.0
11	-	-
12	0	0
13	4.9	4.9
14	0	0
15	3.1	3.1
16	0	0
17	0	0
18	4.8	4.9
19	0	0
20	0	0
21	0	0
22	4.9	0
23	0	0
24	0	0
25	2.5	0
26	0	0
27	2.4	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	1.9	0
35	5.0	5.0
36	3.8	0.4
37	0	0
38	0	0
39	0	0
40	5.0	0
41	0	0
42	-	0
43	0	0
44	0	0
45	2.5	0
46	5.0	0
47	0.4	0
48	0.4	0
49	5.0	0
50	-	0
51	0	0
52	2.6	0
53	0	0
54	1.2	0
55	1.2	0
56	5.0	0
57	0	0
58	0.9	0
59	0	0
60	5.0	5.0
61	2.3	2.3
62	4.9	4.9
63	1.5	1.6
64	0	0
65	0.4	0
66	0	0
67	0	0
68	5.0	5.0
69	3.3	3.2
70	2.7	2.7
71	0	0
72	5.0	5.0
73	0	0
74	5.0	5.0
75	4.9	4.9
76	1.8	0
77	4.6	0
78	1.0	1.1
79	1.9	0
80	0	0
IC902		
1	2.6	0
2	3.3	0
3	2.7	0
4	2.4	0
5	2.2	0
6	1.6	0
7	2.2	0
8	4.3	0
9	1.9	0
10	2.6	0
11	0	0
12	2.6	0
13	0	0
14	1.2	0.4
15	3.8	0.4
16	4.8	0.4
17	0	1.0
18	0.5	0
19	2.9	0
20	2.5	0
21	5.0	0
22	2.0	0
23	2.0	0
24	1.7	0
25	1.8	0
26	0.7	0
27	2.6	0
28	0.6	0.4
29	2.8	0
30	0	0
31	0	0
32	0	0
33	2.5	0
34	4.8	0.4
35	3.2	0
36	2.5	0
37	3.2	0
38	3.2	0
39	2.6	0
40	3.2	0
41	2.6	0
42	3.2	0
43	2.6	0
44	3.2	0
IC903		
1	5.0	5.0
2	0.6	0
3	5.0	5.0
4	0	0

MODE / PIN	REC	PLAY
5	0	0
6	4.1	4.1
7	5.0	5.0
8	5.0	5.0
IC904		
1	0	0
2	6.9	6.9
3	5.0	5.0
IC905		
1	2.4	2.4
2	2.4	2.4
3	2.4	2.4
4	0	4.9
5	1.9	3.4
6	0	2.9
7	0.9	3.8
8	0	0
9	0	0
10	0	0
11	0	0
12	2.4	2.4
13	2.3	2.3
14	0	1.8
IC906		
1	4.7	0.4
2	4.7	0.4
3	0	0
4	4.9	0
5	0	0
6	1.9	0
7	0	0
8	1.9	0
9	5.0	0
10	2.8	0
11	2.0	0
12	2.8	0
13	2.8	0
14	4.8	0.4
IC907		
1	0	0
2	4.9	0.4
3	4.9	0.4
4	0	0
5	4.7	0
6	0	0
7	4.9	0.4
8	6.8	7.0
9	1.0	0
10	0	0
11	0	0
12	1.0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	6.8	7.0
18	0	0
19	0	0
20	5.0	0
21	5.0	0
22	1.9	0.4
23	0	0
24	4.9	0.4
IC908		
1	0	0
2	4.9	0
3	4.9	0
4	0	0
5	4.7	0
6	0	0
7	4.9	0.4
8	6.8	7.0
9	2.9	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	3.0	0
17	6.9	7.0
18	0	0
19	0	0
20	5.0	0
21	0	0
22	1.9	0.4

MODE / PIN	REC	PLAY
23	5.0	0
24	4.9	0.4
IC909		
1	0	0
2	0	0
3	0	0
4	5.0	5.0
5	5.0	5.0
IC910		
1	1.2	0
2	1.9	0
3	1.9	0
4	0	0
5	1.9	0
6	1.9	0
7	1.9	0
8	4.9	0
Q805		
1	0	1.7
2	1.7	1.8
3	0	1.7
4	1.7	1.3
5	1.7	1.3
Q901		
E	0	0
C	4.7	0.4
B	0	0
Q902		
E	4.8	0.4
C	4.6	0
B	4.7	0.4
Q904		
1	0	0
2	0	0
3	0	0
4	4.2	0
5	4.2	0
Q905		
1	2.1	0
2	1.5	0.4
3	3.7	0.4
4	4.9	0.4
5	3.1	0.4
6	0	0
Q906		
1	2.4	0.4
2	1.9	0
3	2.4	0
4	4.9	0.4
5	1.9	0
6	0	0
Q907		
1	1.8	0.4
2	1.2	0
3	1.7	0.4
4	4.9	0.4
5	1.1	0
6	0	0

<REAR>

MODE / PIN	REC	PLAY
IC1		
1	4.3	4.5
2	6.1	6.2
3	6.4	6.4
4	0	0
5	1.4	1.5
6	1.2	1.2
7	1.2	1.1
8	4.9	4.9
9	0	0
10	1.8	1.8
11	0	0
12	0	0
13	6.9	0
14	0	0
15	1.8	1.7
16	1.2	1.2
17	1.5	1.6
18	6.9	6.9
19	2.4	2.4
20	6.8	6.9
21	6.9	7.0
22	5.0	0
23	0	0

MODE / PIN	REC	PLAY
24	1.2	0
25	1.2	1.2
26	1.2	0
27	1.5	2.4
28	1.7	0
29	6.9	6.9
30	0	0
31	2.4	2.4
32	0	0
33	2.4	0
34	5.1	7.0
35	6.5	6.9
36	6.9	7.0
37	6.6	6.6
38	0	0
39	6.9	7.0
40	6.5	6.9
41	2.3	0
42	0	0
43	0.7	0.7
44	6.1	6.1
45	6.9	7.0
46	5.4	6.1
47	2.4	2.4
48	6.0	6.1
IC2		
1	5.0	0
2	6.9	7.0
3	4.9	0
4	0	0
Q1		
E	6.9	6.9
C	6.9	6.9
B	0	0
Q3		
1	6.3	6.4
2	4.3	4.2
3	6.9	6.9
Q4		
1	4.2	4.9
2	4.9	0.4
3	4.9	4.9
Q5		
E	0	0
C	0	0
B	5.0	0
Q6		
1	0	0
2	6.4	6.4
3	6.9	7.0
Q7		
1	6.5	6.9
2	-5.1	0
3	6.9	6.9
Q9		
E	0	0
C	0	0
B	4.4	4.2
Q201		
1	6.1	7.1
2	6.7	0
3	6.8	7.1
Q202		
E	0	0
C	0	7.1
B	3.5	0
Q203		
1	6.2	6.3
2	6.9	7.0
3	6.9	7.0
Q204		
E	0	0
C	0	0
B	0	4.2
Q205		
1	6.0	0
2	6.0	0
3	6.7	0

<CCD>

MODE / PIN	EE
IC201	
1	-7.5
2	-7.4
3	0
4	0
5	0
6	4.9
7	0
8	4.9
9	0
10	4.9
11	0
12	4.6
13	4.9
14	4.6
15	0
16	14.9
17	-7.1
18	-7.2
19	0
20	15.0
IC202	
1	4.9
2	0
3	-9.2
4	-9.8
5	1.6
6	1.6
7	-4.4
8	4.8
9	0
10	0
11	0
12	4.6
13	4.6
14	4.9
15	4.9
16	4.9
17	0
18	0
19	1.0
20	0
21	0
22	2.4
23	0
24	4.9
25	0
26	0.4
27	0
28	3.6
29	1.2
30	0
31	1.9
32	4.9
33	1.7
34	0
35	0
36	0
37	1.1
38	2.6
39	5.0
40	0
41	4.9
42	2.2
43	-6.6
44	4.9
45	4.9
46	0
47	0
48	0.7
49	1.9
50	0
51	5.0
52	0
53	0
54	-4.8
55	-4.9
56	0
57	4.9
58	0.4
59	2.4
60	0
61	-5.1
62	-5.2
63	-2.4
64	-2.4

MODE / PIN	EE
IC203	
1	1.8
2	0.4
3	2.7
4	4.9
5	-4.7
6	-4.8
7	0
8	1.8
Q203	
E	11.2
C	14.9
B	11.9
Q204	
E	1.3
C	4.9
B	1.8
Q205	
E	1.8
C	4.9
B	2.4

<E-VF> AX260/460EG

MODE / PIN	EE
IC7001	
1	2.1
2	4.7
3	2.0
4	0
5	0
6	0
7	2.0
8	4.5
9	4.2
10	0
11	1.9
12	4.4
13	2.7
14	1.8
15	1.8
16	1.6
Q7001	
1	0.5
2	14.7
3	0
Q7002	
E	2.7
C	-25.2
B	2.2
Q7003	
E	-24.6
C	-34.8
B	-25.2

<E-VF> AX360EG

MODE / PIN	EE
IC7101	
1	0.6
2	0.7
3	0.5
4	0.5
5	0.4
6	0.5
7	0
8	0.5
9	4.9
10	3.6
11	0
12	0.5
13	0.5
14	0.5
15	0
16	2.4
IC7102	
1	0.4
2	0
3	0.4
4	0.4
5	4.9
IC7103	
1	0
2	0
3	0.5
4	0
5	4.3
6	4.3
7	4.8
8	4.9
Q7101	
E	0
C	0.5
B	0
Q7102	
1	0.5
2	3.6
3	0
Q7103	
1	0
2	4.6
3	0
Q7104	
E	0
C	0.4
B	0
Q7107	
1	2.8
2	2.4
3	3.0
4	4.9
5	3.4
6	4.9
Q7108	
1	2.8
2	2.4
3	2.8
4	2.4
5	3.2
6	2.8
IC7201	
1	1.5
2	3.2
3	2.1
4	2.7
5	1.6
6	0
7	4.7
8	2.4
9	0
10	0
11	0
12	2.9
13	0
14	2.2
15	-2.7
16	0
17	0
18	0
19	4.8
20	0
21	0
22	2.4
23	2.4
24	4.8
25	0
26	0
27	0
28	1.9
29	1.9
30	0.5
31	0
32	0
33	4.8
34	4.8
35	4.8
36	4.8
37	4.8
38	0
39	6.0
40	6.0
41	6.0
42	6.0
43	6.0
44	6.0
45	12.0
46	3.0
47	4.7
48	4.1
49	2.7
50	2.7
51	2.3
52	3.0
53	3.0
54	4.7
55	2.4
56	2.6
57	2.1
58	2.3
59	3.3
60	2.0
61	2.5
62	0.5
63	2.3
64	2.3
Q7201	
E	1.5
C	4.8
B	2.1
Q7202	
1	5.6
2	6.2
3	0
4	6.2
5	5.7
6	12.0
Q7203	
1	13.5
2	12.1
3	12.6
4	12.6
5	12.1
6	12.6
Q7204	
E	12.0
C	12.7
B	12.0

<E-VF> AX260/460EG

MODE / PIN	EE
IC7001	
1	2.1
2	4.7
3	2.0
4	0
5	0
6	0
7	2.0
8	4.5
9	4.2
10	0
11	1.9
12	4.4
13	2.7
14	1.8
15	1.8
16	1.6
Q7001	
1	0.5
2	14.7
3	0
Q7002	
E	2.7
C	-25.2
B	2.2
Q7003	
E	-24.6
C	-34.8
B	-25.2

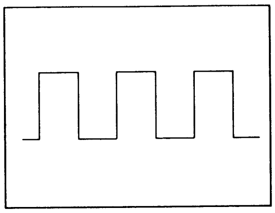
<E-VF> AX360EG

MODE / PIN	EE
IC7101	
1	0.6
2	0.7
3	0.5
4	0.5
5	0.4
6	0.5
7	0
8	0.5
9	4.9
10	3.6
11	0
12	0.5
13	0.5
14	0.5
15	0
16	2.4
IC7102	
1	0.4
2	0
3	0.4
4	0.4
5	4.9
IC7103	
1	0
2	0
3	0.5
4	0
5	4.3
6	4.3
7	4.8
8	4.9
Q7101	
E	0
C	0.5
B	0
Q7102	
1	0.5
2	3.6
3	0
Q7103	
1	0
2	4.6
3	0
Q7104	
E	0
C	0.4
B	0
Q7107	
1	2.8
2	2.4
3	3.0
4	4.9
5	3.4
6	4.9
Q7108	
1	2.8
2	2.4
3	2.8
4	2.4
5	3.2
6	2.8
IC7201	
1	1.5
2	3.2
3	2.1
4	2.7
5	1.6
6	0
7	4.7
8	2.4
9	0
10	0
11	0
12	2.9
13	0
14	2.2
15	-2.7
16	0
17	0
18	0
19	4.8
20	0
21	0
22	2.4
23	2.4
24	4.8
25	0
26	0
27	0
28	1.9
29	1.9
30	0.5
31	0
32	0
33	4.8
34	4.8
35	4.8
36	4.8
37	4.8
38	0
39	6.0
40	6.0
41	6.0
42	6.0
43	6.0
44	6.0
45	12.0
46	3.0
47	4.7
48	4.1
49	2.7
50	2.7
51	2.3
52	3.0
53	3.0
54	4.7
55	2.4
56	2.6
57	2.1
58	2.3
59	3.3
60	2.0
61	2.5
62	0.5
63	2.3
64	2.3
Q7201	
E	1.5
C	4.8
B	2.1
Q7202	
1	5.6
2	6.2
3	0
4	6.2
5	5.7
6	12.0
Q7203	
1	13.5
2	12.1
3	12.6
4	12.6
5	12.1
6	12.6
Q7204	
E	12.0
C	12.7
B	12.0

4.25 WAVEFORMS

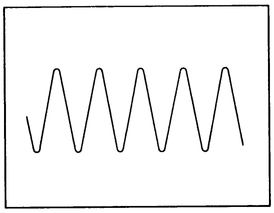
— SYSCON —

WF1 IC1-89



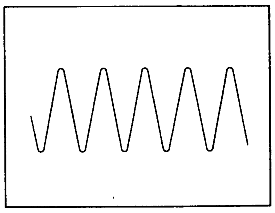
REC/PB 0.2Vp-p
10mV/0.5msec/DIV

WF2 IC1-90



REC/PB 1.5Vp-p
50mV/0.5msec/DIV

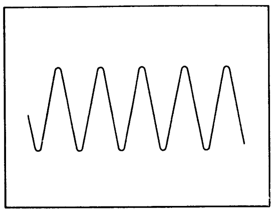
WF3 IC1-91



REC/PB 3.0Vp-p
0.1V/0.5msec/DIV

— MDA —

WF1 IC301-3



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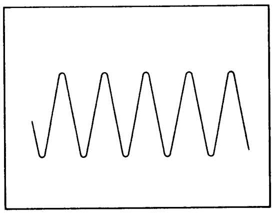
50mV/0.5msec/DIV

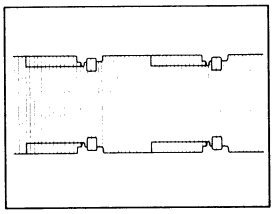
WF2 IC351-15



REC/PB 3.0Vp-p
0.1V/0.5msec/DIV

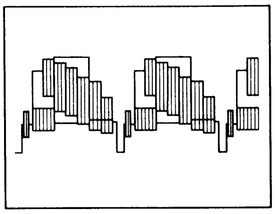
— PROCESS&Y/C —

WF1 IC501-39



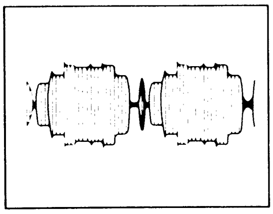
REC1.2Vp-p
50mV/5msec/DIV

WF2 IC501-50



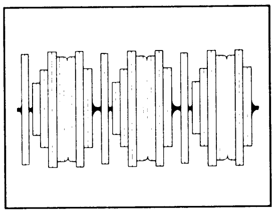
REC2.4Vp-p,PB2.0Vp-p
0.1V/20μ sec/DIV

WF3 IC501-57



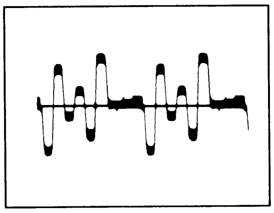
PB0.1Vp-p
5mV/20μ sec/DIV

WF4 IC501-60



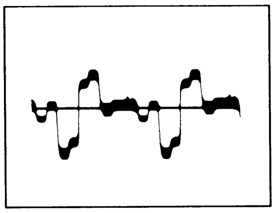
REC0.6Vp-p
10mV/20μ sec/DIV

WF5 IC501-94



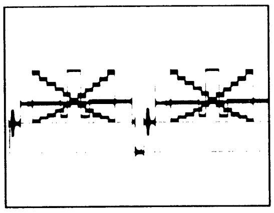
EE0.5Vp-p
20mV/20μ sec/DIV

WF6 IC501-96



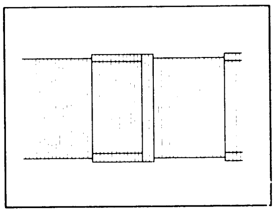
EE0.6Vp-p
20mV/20μ sec/DIV

WF7 IC501-116



EE0.7Vp-p
20mV/10μ sec/DIV

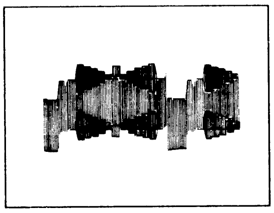
WF8 IC502-10



PB0.4Vp-p
20mV/1msec/DIV

— CCD —

WF1 CN201-4



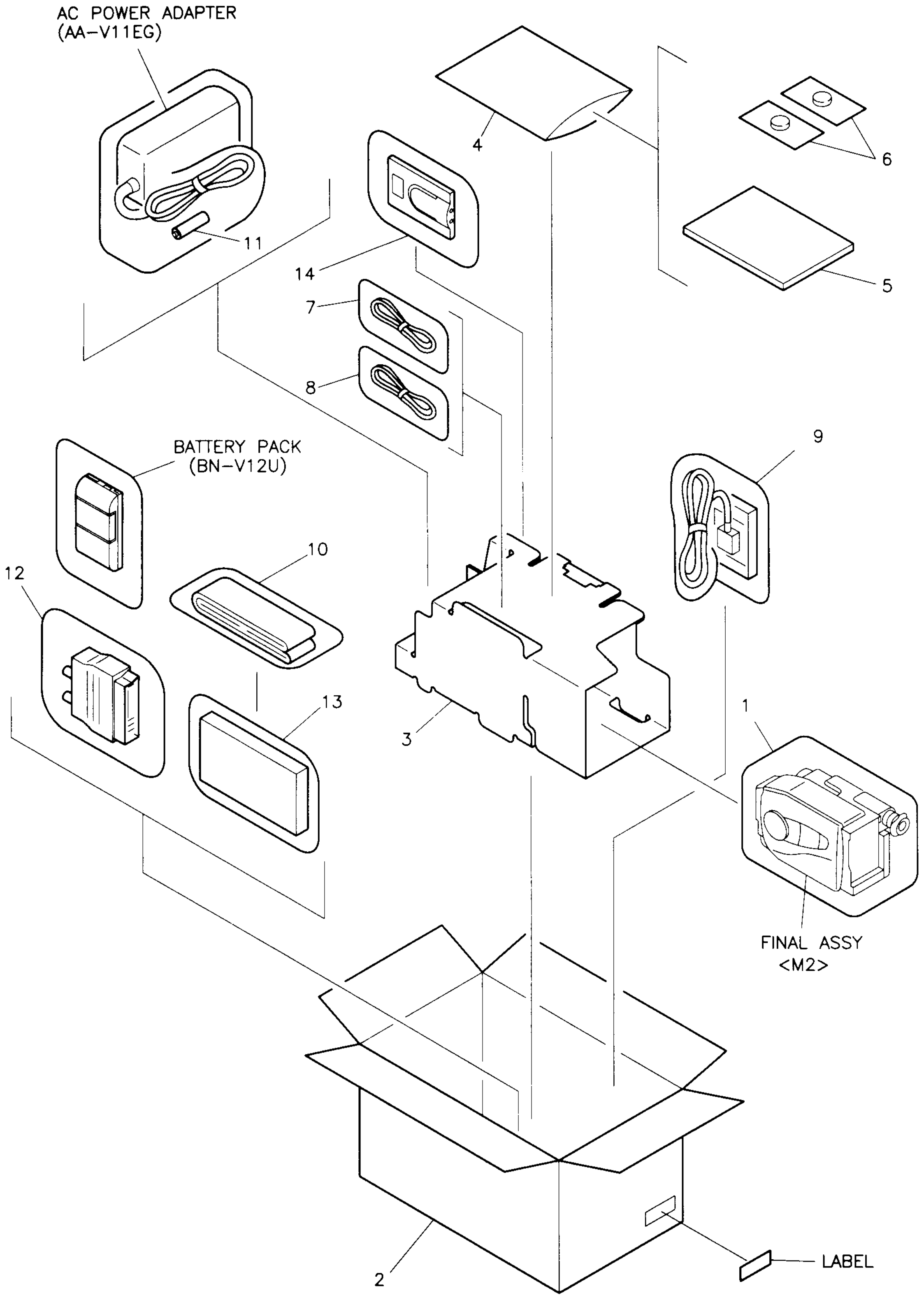
EE0.9Vp-p
20mV/10μ sec/DIV

SECTION 5
PARTS LIST

SAFETY PRECAUTION

Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.

5.1 PACKING ASSEMBLY <M1>

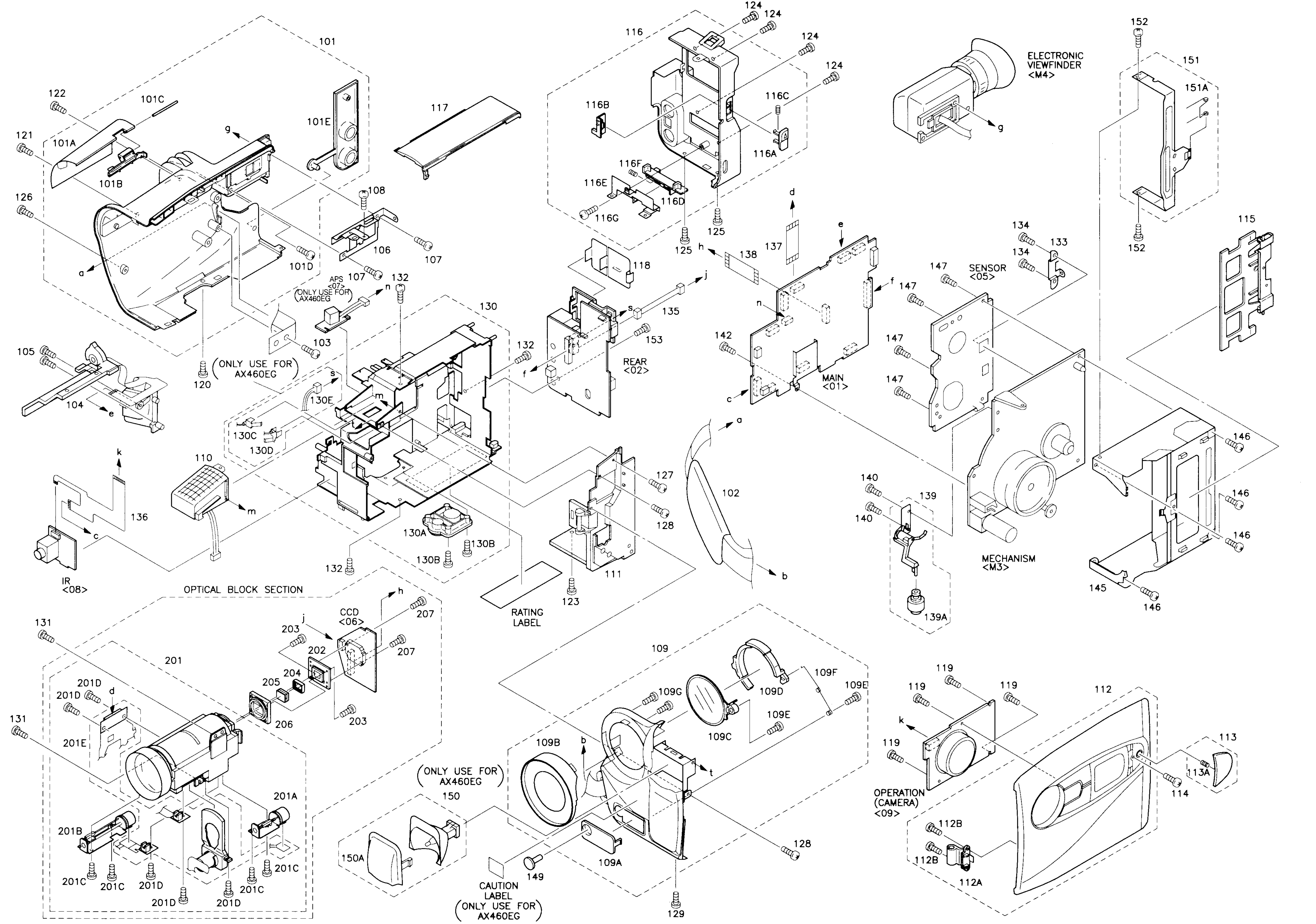


PACKING ASSEMBLY <M1>

#⚠	REF No.	PART No.	PART NAME, DESCRIPTION
	1	YQM30021-34	POLY BAG
	2	YQ32238-10	PACKING CASE,AX260EG
		YQ32238-12	PACKING CASE,AX360EG
		YQ32238-14	PACKING CASE,AX460EG
	3	YQ32239-1-5	CUSHION
	4	YQM30061-2	POLY BAG
⚠	5	YU30052-562	INSTRUCTIONS,EN,FR
⚠		YU30052-563	INSTRUCTIONS,GE,DU
⚠		YU30052-564	INSTRUCTIONS,SP,IT
⚠		YU30052-565	INSTRUCTIONS,SW,DE
⚠		YU30052-566	INSTRUCTIONS,FI,NO
⚠	6	PECA0903	LI BATTERY,AX260EG/AX360EG
⚠		PECA0903	LI BATTERY,X2 AX460EG
	7	PEAC0362-150	CABLE ASSY,AUDIO/VIDEO
	8	PEAC0428-150	CABLE ASSY,EDITING CABLE
	9	PEAC0134-01-04	DC PLUG CORD
	10	YQ10188A-1	S STRAP ASSY
	11	R6PRPA-B	BATTERY
	12	PEMC1174	CONNECTOR
	13	YQ31963A-3	CASS.ADAPTER ASSY
		or YQ31963B-3	CASS.ADAPTER ASSY
	14	YQ20710C	REMOTE CONTROLLER,AX460EG

- INSTRUCTIONS
  EN .... ENGLISH
  FR .... FRENCH
  GE .... GERMAN
  DU .... DUTCH
  SP .... SPANISH
  IT .... ITALIAN
  SW .... SWEDISH
  DE .... DANISH
  FI .... FINNISH
  NO .... NORWEGIAN

5.2 FINAL ASSEMBLY <M2>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122
101C
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101A
101B
g
101E
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101D
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APS
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ONLY USE FOR
AX460EG
n
132
130
105
103
120
ONLY USE FOR
AX460EG
104
e
s
130E
m
130C
130D
t
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110
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c
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146
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201D
201D
d
201E
131
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207
CCD
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j
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207
202
204
205
206
203
201A
201B
201C
201C
201D
201D
201D
201C
201C
ONLY USE FOR
AX460EG
150
150A
109
109G
109D
109F
109E
109E
109C
109B
b
t
109A
149
128
129
CAUTION
LABEL
ONLY USE FOR
AX460EG
119
119
119
119
k
112
113
113A
114
OPERATION
(CAMERA)
<09>
112B
112B
112A

****

FINAL ASSEMBLY <M2>

#⚠	REF No.	PART No.	PART NAME, DESCRIPTION
⚠	101	YQ10575F	LOWER CASE ASSY
	101A	YQ32062-2	COVER(D.OPE)
	101B	YQ32224	GUIDE
	101C	YQ43795	SHAFT
	101D	YQM30032-60	SPECIAL SCREW,M2X5
	101E	YQ31850	CAP(JACK)
	102	YQ20969-1-1	GRIP BELT
	103	YQ43762-4	SCREW
	104	YQ10577-1-2	OPERATION UNIT
	105	YQM30032-4-2	SPECIAL SCREW,X2 M2X6
	106	YQ32067-1-2	BRACKET(VF)
	107	YQ43762-4	SCREW,X2
	108	YQM30032-37	SPECIAL SCREW,M2X3
	109	YQ10606C-2	FRONT PANEL ASSY,AX460EG
		YQ10578B-2	FRONT PANEL ASSY,AX260EG/AX360EG
	109A	YQ44262	IR WINDOW
	109B	YQ32157-1-1	HOOD
	109C	YQ44264	SHUTTER
	109D	YQ32069-2	KNOB(RING)
	109E	YQ43762	SCREW,X2
	109F	YQ44265-1-1	TORSION SPRING
	109G	YQM30032-8	SPECIAL SCREW,X2 M1.7X5
	110	YQ20901-1-1	MICROPHONE
	111	YQ20902-2-2	UPPER COVER
⚠	112	YQ10580G-3	CASSETTE COVER ASSY,AX260EG/AX360EG
⚠		YQ10580H-3	CASSETTE COVER ASSY,AX460EG
	112A	YQ44268	HINGE(C.COVER)
	112B	YQM30032-4-2	SPECIAL SCREW,X2 M2X6
	113	YQ44269A-3	BUTTON(PUSH)ASSY
	113A	YQM30002-51-16	COMPRESSION SPRING
	114	YQM30032-37	SPECIAL SCREW,M2X3
	115	YQ32074A	CASS.COVER INSIDE ASSY
⚠	116	YQ10582B-2	REAR COVER ASSY,AX260EG/AX360EG
⚠		YQ10582F-2	REAR COVER ASSY,AX460EG
	116A	YQ32077-1-1	KNOB(EJECT)
	116B	YQ32078	PLATE(EJECT)
	116C	YQM30002-49	COMPRESSION SPRING
	116D	YQ32079	KNOB(B.RELEASE)
	116E	YQ32080	BKT(B.RELEASE)
	116F	YQM30002-48	COMPRESSION SPRING
	116G	YQM30032-2-2	SPECIAL SCREW,M2X5
	117	YQ32302F	TOP COVER ASSY,AX260EG
		YQ32302H	TOP COVER ASSY,AX360EG
		YQ32302S	TOP COVER ASSY,AX460EG
	118	YQ31821-1-2	CAP(LITHIUM)
	119	YQM30032-2-2	SPECIAL SCREW,X4 M2X5
	120	YQM30032-4-2	SPECIAL SCREW,M2X6
	121	YQM30032-8	SPECIAL SCREW,M1.7X5
	122	YQM30032-4-2	SPECIAL SCREW,M2X6
	123	YQM30032-4-2	SPECIAL SCREW,M2X6
	124	YQM30032-4-2	SPECIAL SCREW,X4 M2X6
	125	YQM30032-4-2	SPECIAL SCREW,X2 M2X6
	126	YQM30032-4-2	SPECIAL SCREW,M2X6
	127	YQM30032-4-2	SPECIAL SCREW,M2X6
	128	YQM30032-4-2	SPECIAL SCREW,M2X6,AX260EG/AX360WG
		YQM30032-4-2	SPECIAL SCREW,X2 M2X6 AX460EG
	129	YQM30032-4-2	SPECIAL SCREW,M2X6
⚠	130	YQ20906A-1	FRAME ASSY,AX460EG
⚠		YQ20906B-1	FRAME ASSY,AX260EG/AX360EG
	130A	YQ31843	BASE
	130B	YQM30032-4-2	SPECIAL SCREW,X2 M2X6
	130C	YQ43810	CONTACT(LIGHT),AX460EG
	130D	YQ44273	CONTACT(2),AX460EG
	130E	ML-Y00718B	LIGHT WIRE,AX460EG
	131	YQM30032-4-2	SPECIAL SCREW,X2 M2X6
	132	YQ43545	SPECIAL SCREW,X3
	133	YQ43544	BRACKET(MECHA)
	134	YQ44457-3	SCREW,X2
	135	ML-Y00720B	CCD WIRE
	136	PEWR0820	FPC
	137	PEWR0825	FFC
	138	PEWR0821	FFC
	139	YQ44027A-6	CLEANER ASSY
	139A	YQ44109A-2	CLEANER ROLLER ASSY
	140	YQ44458	SCREW,X2
	142	YQ44457-3	SCREW
	145	YQ31752B-8	CASSETTE HOUSING ASSY
	146	YQ44457-3	SCREW,X4
	147	SPSH1730M	SCREW,X4
	149	YQ43518	CAP(JACK)
	150	YQ20898A	DC LIGHT ASSY,AX460EG
	150A	YQ20899	LENS,AX460EG
	151	YQ32300A	FRONT FRAME ASSY
	151A	YQ44144	TAPE GUIDE
	152	SPSH1725M	SCREW,X2
	153	YQM30032-4-2	SPECIAL SCREW,M2X6

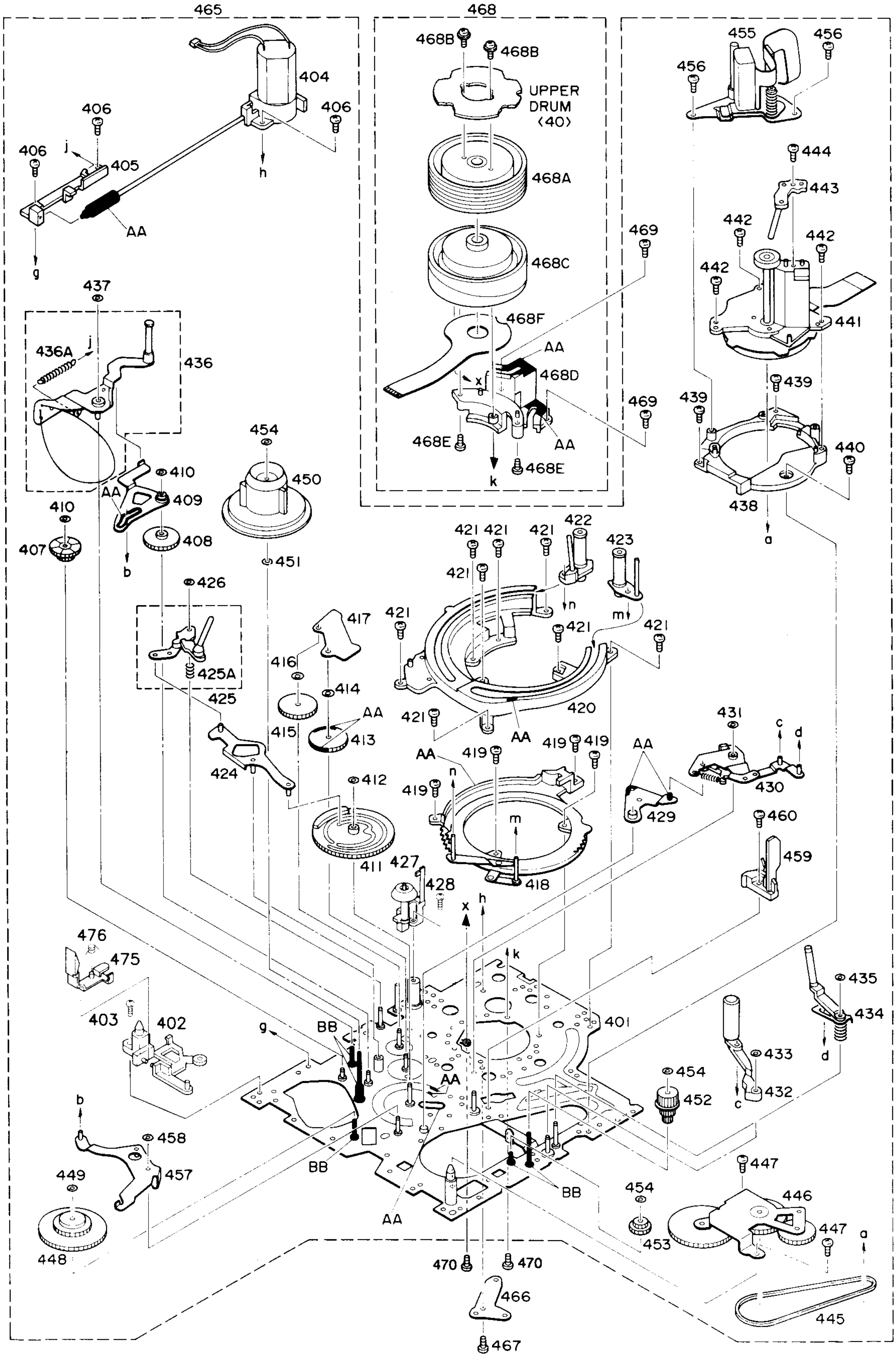
– OPTICAL BLOCK SECTION –

#⚠	REF No.	PART No.	PART NAME, DESCRIPTION
	201	YU30822-1-1	OP BLOCK ASSY
	201A	YU30822-002	FOCUS MOTOR UNIT
	201B	YU30822-001	ZOOM MOTOR UNIT
	201C	YU30780-003	SCREW,X4M1.7X4.5
	201D	YU30703-016	SCREW,X5 M1.7X3.5
	201E	YU30822-006	IRIS UINT
	202	YS40113G	CCD BASE ASSY
	203	SPSN2090Z	SCREW,X2
	204	YQ32122	SPACER RUBBER
	205	YU42099	OP LOW PASS FILTER
	206	YQ20823	CCD SPACER
	207	SPSP2006Z	SCREW,X2

5.3 MECHANISM ASSEMBLY <M3>

BEWARE OF BOGUS PARTS

Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.


465
468
468B
468B
UPPER DRUM ⟨40⟩
468A
468C
468F
468D
468E
468E
AA
AA
AA
x
k
404
406
406
406
j
405
h
AA
g
455
456
456
444
443
442
442
442
441
469
469
439
439
440
438
a
437
436A
j
436
454
450
410
409
410
AA
407
408
b
451
421
421
421
421
421
421
421
422
423
n
m
426
417
416
425A
425
414
415
AA
413
424
412
420
AA
419
419
419
419
AA
n
m
418
411
427
428
x
h
k
431
c
d
430
AA
429
460
459
476
475
403
402
g
BB
401
435
434
d
433
432
c
454
452
b
458
449
457
BB
AA
BB
AA
454
453
447
446
447
a
448
470
470
466
445
467

Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-P	AA
Oil	YTU94027	BB

NOTE: The section marked in AA and BB indicate lubrication and greasing areas.

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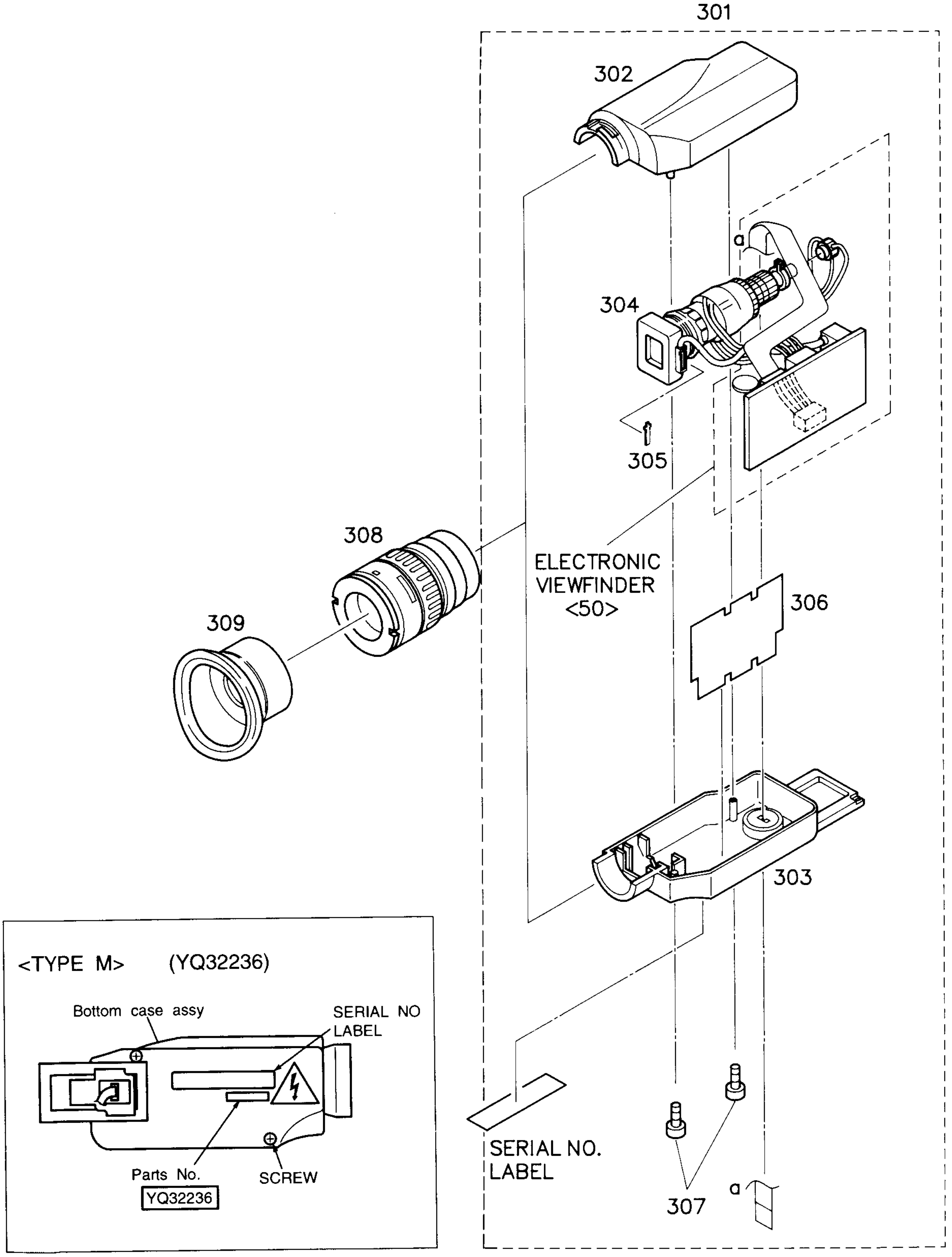
MECHANISM ASSEMBLY <M3>

#⚠ REF No.	PART No.	PART NAME, DESCRIPTION
401	YQ20954A-4	MAIN DECK ASSY
402	YQ32218	CASS.GUIDE(L)
403	YQ44457	SCREW
404	YQ31856A-2	MOTOR BRACKET ASSY
405	YQ20793	WORM BRACKET
406	YQ44457	SCREW,X3
407	YQ31783	WHEEL GEAR
408	YQ44328	MIDDLE GEAR
409	YQ43849B	CANCEL LEVER ASSY
410	PQM30017-27	SLIT WASHER,X2
411	YQ20827-2	CONTROL CAM
412	PQM30017-25	SLIT WASHER
413	YQ43853A	LOADING GEAR(T)ASSY
414	PQM30017-27	SLIT WASHER
415	YQ43852A	LOADING GEAR(S)ASSY
416	PQM30017-27	SLIT WASHER
417	YQ43634	COVER PLATE
418	YQ43635C-7	LOADING RING ASSY
419	YQ44457	SCREW,X4
420	YQ10516-1-11	GUIDE RAIL
421	YQ44457-5	SCREW,X8
422	YQ43646A-4	SUPPLY POLE BASE ASSY
423	YQ43654A-8	TAKE-UP POLE BASE ASSY
424	YQ44439A-1	DRIVE LEVER ASSY
425	YQ43663C	SLANT ARM ASSY
425A	YQ43670	TOR.SPRING(S)
426	PQM30017-27	SLIT WASHER
427	YQ44436A-1	ROLLER BASE ASSY
428	YQ44457	SCREW
429	YQ32230	LINK LEVER
430	YQ43682A-6	LINK ARM ASSY
431	PQM30017-25	SLIT WASHER
432	YQ43691A-4	PINCH ROLLER ARM ASSY
433	PQM30017-25	SLIT WASHER
434	YQ43698A-4	TAKE-UP GUIDE ARM ASSY
435	PQM30017-27	SLIT WASHER
436	YQ44199C-6	TENSION ARM ASSY
436A	YQ43848-1-2	TENSION SPRING
437	PQM30017-27	SLIT WASHER
438	YQ20797-1-3	MOTOR BASE
439	YQ44457	SCREW,X2
440	YQ44460	SCREW
441	YU42048-1-2	CAPSTAN MOTOR
442	YQ44304	TAPPING SCREW,X3
443	YQ43708A-2	SLANT POLE BASE ASSY
444	YQ44304	TAPPING SCREW
445	YQ43710	TIMING BELT
446	YQ43711B-6	CENTER PULLEY UNIT
447	YQ44457-2	SCREW,X2
448	YQ43729A	SUPPLY CLUCH ASSY
449	PQM30017-27	SLIT WASHER
450	YQ31861-1-7	REEL DISC
451	Q03093-835	WASHER
452	YQ31787	TAKE-UP GEAR
453	YQ43737	BRAKE SUB GEAR
454	PQM30017-27	SLIT WASHER,X3
455	YQ43738A-8	A/C HEAD UNIT
456	SPSN1750Z	SCREW,X2
457	YQ43743B	EJECT LEVER ASSY
458	PQM30017-27	SLIT WASHER
459	YQ31833-1-1	LED GUIDE
460	YQ44457	SCREW
465	YMA0019A	MECHA(A) ASSY
466	YU42051	BRUSH
467	YQ44457-3	SCREW
468	YDV2066A	DRUM ASSY
468A	YDM2067B	UPPER DRUM ASSY
468B	YDM4031	SCREW,X2
468C	YDM2083A	LOWER DRUM ASSY
468D	YDM1003-1-5	CHATCHER
468E	SPSH1730M	SCREW,X2
468F	YDM2080-1-2	OUT PUT FPC
469	YQ44457	SCREW,X2
470	SPSH1740Z	SCREW,X2
475	YQ32219	SW.LEVER(L)
476	YQ44422-1-1	TORSION SPRING

5.4 ELECTRONIC VIEWFINDER ASSEMBLY <M4> [GR-AX260EG/AX460EG]

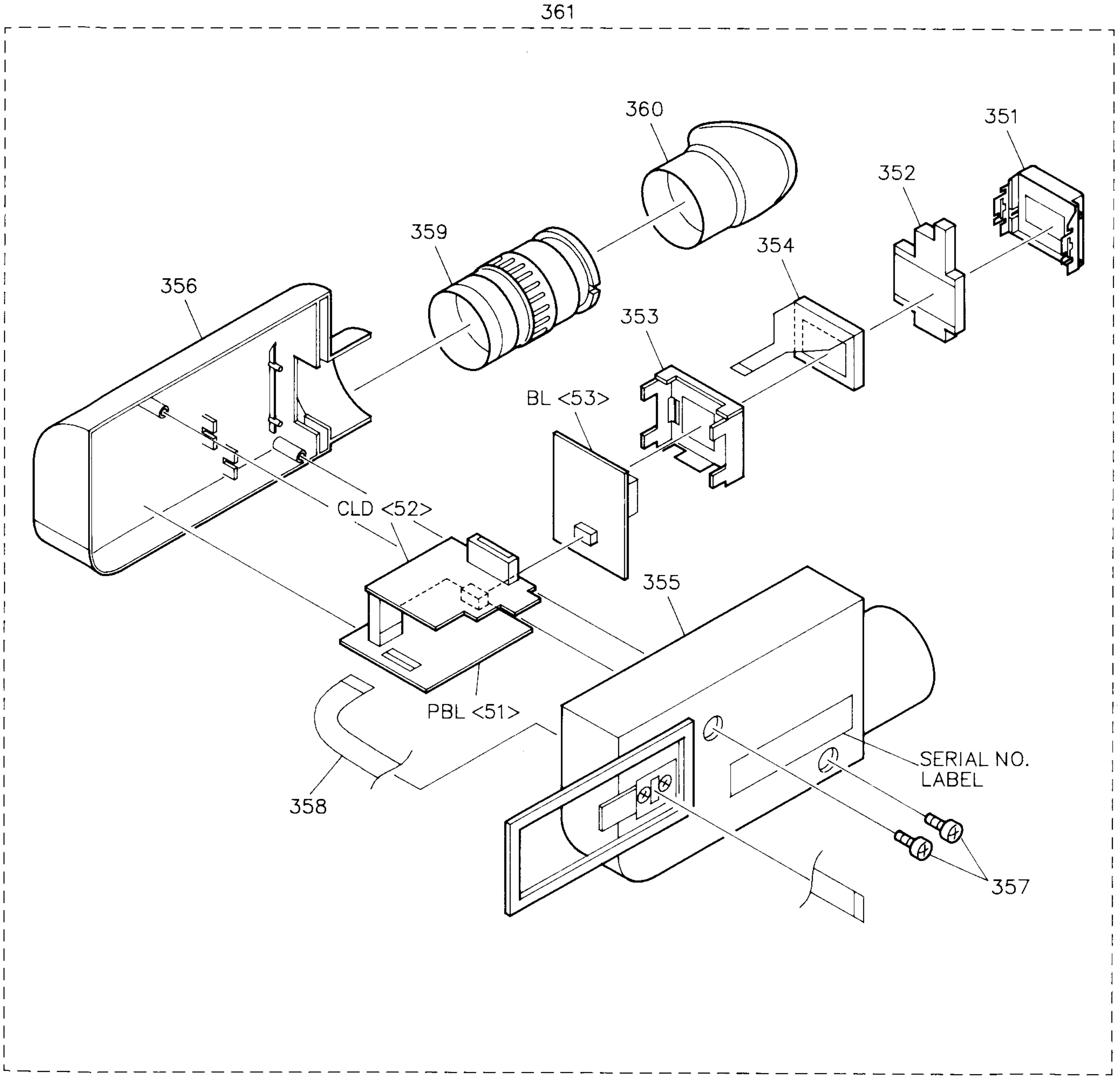

301
302
a
304
305
308
309
ELECTRONIC
VIEWFINDER
<50>
306
303
SERIAL NO.
LABEL
307
a
<TYPE M> (YQ32236)
Bottom case assy
SERIAL NO
LABEL
Parts No.
YQ32236
SCREW

#⚠ REF No.	PART No.	PART NAME, DESCRIPTION
******	******	******

ELECTRONIC VIEWFINDER ASSEMBLY <M4>

#⚠ REF No.	PART No.	PART NAME, DESCRIPTION
⚠ 301	YQ32236C	E.VF ASSY
⚠ 302	YQ32236-001	TOP CASE
⚠ 303	YQ32236-002	BOTTOM CASE ASSY
⚠ 304	YQ31803-001	CRT/DY ASSY
⚠ 305	YU30181-014	HV COVER
⚠ 306	YQ31803-100	INSULATOR
307	YU30045-014	SCREW,X2 M1.7X5
308	YQ31803-200	LENS ASSY
309	YQ31803-201	EYE CAP

5.5 ELECTRONIC VIEWFINDER ASSEMBLY <M4> [GR-AX360EG]


361
360
351
352
359
354
356
353
BL <53>
CLD <52>
355
PBL <51>
SERIAL NO. LABEL
358
357

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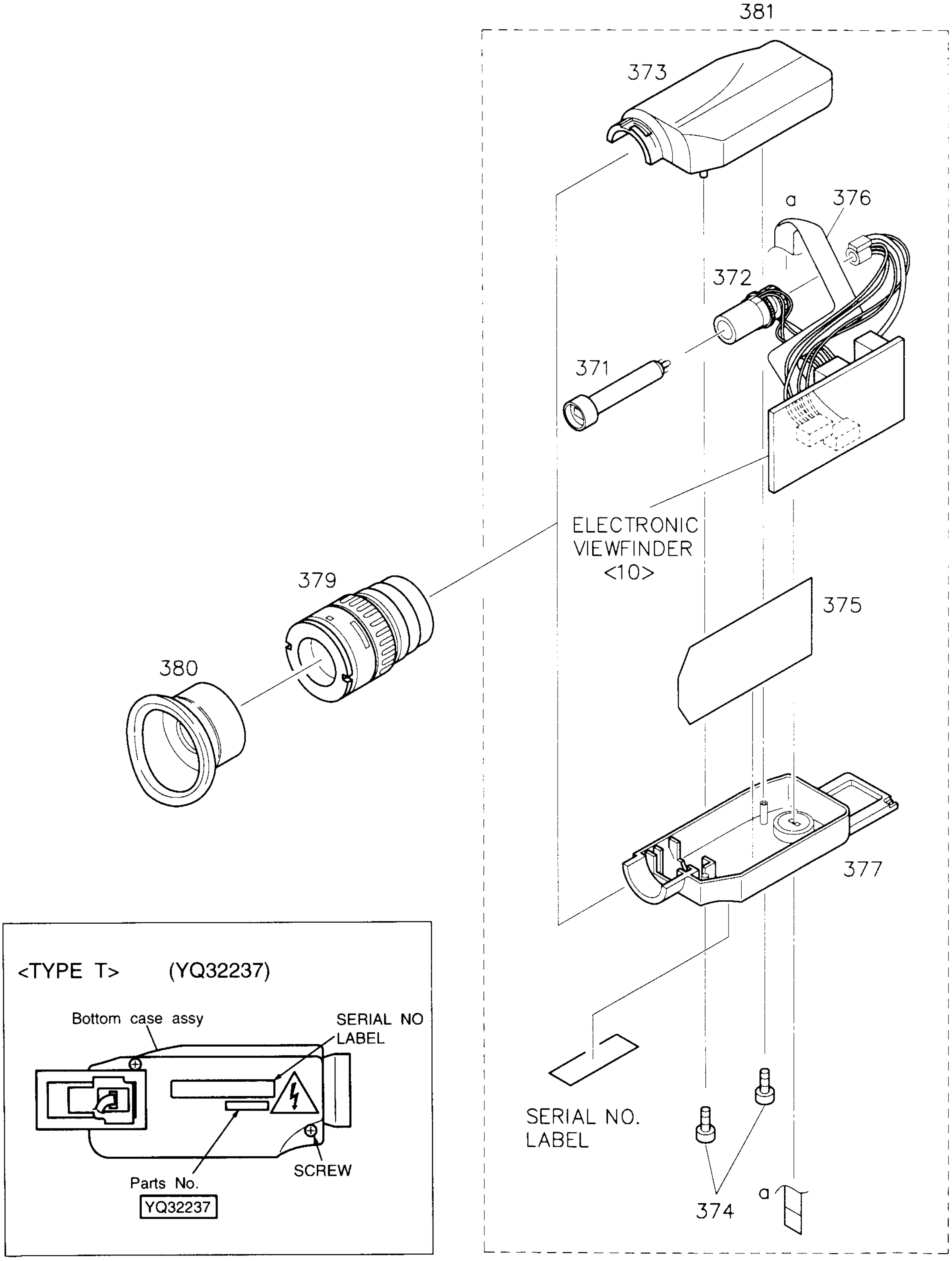
- ELECTRONIC VIEWFINDER ASSEMBLY <M4> -

#⚠	REF No.	PART No.	PART NAME, DESCRIPTION
	351	YQ31801-1-1	HOLDER(LCD)
	352	YQ43792	WINDOW(LCD)
	353	YQ31802	HOLDER(LAMP)
	354	PEDP0191	LCD PANEL
⚠	355	YQ31958F	BOTTOM CASE ASSY
⚠	356	YQ31932B	TOP CASE ASSY
	357	SPSN2080M	SCREW,X2
	358	PEWR0775	FPC
	359	YQ31803-200	LENS ASSY
	360	YQ31803-201	EYE CAP
⚠	361	YS20782R	E.VF ASSY

5.6 ELECTRONIC VIEWFINDER ASSEMBLY <M4> [GR-AX260EG/AX460EG]


381
373
a
376
372
371
ELECTRONIC VIEWFINDER <10>
379
375
380
377
<TYPE T> (YQ32237)
Bottom case assy
SERIAL NO LABEL
Parts No.
YQ32237
SCREW
SERIAL NO. LABEL
374
a

****

- ELECTRONIC VIEWFINDER ASSEMBLY <M4> -

#⚠	REF No.	PART No.	PART NAME, DESCRIPTION
⚠	371	PEDP0193	CRT
⚠	372	PELN1179	DEFLECTION YOKE
⚠	373	YQ10628-2	TOP CASE
	374	SPSN1780M	SCREW,X2
⚠	375	YQ44473	INSULATOR
	376	PEWR0819	FPC
⚠	377	YQ32237-002	BOTTOM CASE ASSY
	379	YQ31803-200	LENS ASSY
	380	YQ31803-201	EYE CAP
⚠	381	YQ32237C	E.VF ASSY

.7 ELECTRICAL PARTS LIST

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MAIN BOARD ASSEMBLY <01>

△ REF No.	PART No.	PART NAME, DESCRIPTION	
PWBA	YB10160G-01	MAIN BOARD ASSY,AX260EG	
	YB10160I-01	MAIN BOARD ASSY,AX360EG	
	YB10160J-01	MAIN BOARD ASSY,AX460EG	
IC1	M37771M6A171HP	IC	
IC2	UPD6462GS-902-X	IC	
IC4	MC74HC14ADT	IC	
	or TC74VHC14FS	IC	
IC5	S-8423PFS-X	IC	
IC6	BA6417F	IC	
IC301	VC5035-XE	IC	
IC351	BA6862FS	IC	
IC401	BA7751AFS	IC	
IC402	BA15218F	IC	
	or XRA15218F	IC	
IC501	JCY0050A	IC	
IC502	M52364FP	IC	
IC503	MN3867AS	IC	
	or MN3867S	IC	
IC601	M52359FP	IC	
IC801	XRU4053BCF	IC	
IC802	XRA10324AFV-XE	IC	
IC803	XRA10358F	IC	
	or UPC358GR	IC	
IC901	UPD78054GC-164	IC	
IC902	JCY0007-1-XE	IC	
IC903	X25C02S-XE	IC	
IC904	S-81250HG-RD-X	IC	
	or RH5RL50AA-XE	IC	
IC905	XRA10324AFV-XE	IC	
IC906	MC14011BDT	IC	
	or TC4011BFS	IC	
IC907	TB6504F	IC	
IC908	TB6504F	IC	
IC909	PST9140N	IC	
IC910	UPC358GR	IC	
Q1	2SA1576(QRS)	TRANSISTOR	
Q2	DTC114EU	TRANSISTOR	
Q3	DTA114EU	TRANSISTOR	
Q5	DTA114EU	TRANSISTOR	
Q6	DTC114EU	TRANSISTOR	
Q7	2SA1576(QRS)	TRANSISTOR	
Q201	DTC144EE	TRANSISTOR	
	or UN9213	TRANSISTOR	
Q202	2SC4617(RS)	TRANSISTOR	
Q203	DTA114EE	TRANSISTOR	
	or UN9111	TRANSISTOR	
Q351	MDC02	TRANSISTOR	
Q401	DTA123EE	TRANSISTOR	
	or UN911V	TRANSISTOR	
Q402	DTA143EE	TRANSISTOR	
	or UN911L	TRANSISTOR	
Q403	UMW1N	PAIR TRANSISTOR	
	or XP1501	TRANSISTOR	
Q404	DTA124EE	TRANSISTOR	
	or UN9112	TRANSISTOR	
Q405	DTC144EE	TRANSISTOR	
	or UN9213	TRANSISTOR	
Q408	2SC4097(QR)	TRANSISTOR	
Q503	2SC4617(QRS)	TRANSISTOR	
Q504	2SA1774(QRS)	TRANSISTOR	
Q505	2SA1774(QRS)	TRANSISTOR	
Q506	2SA1774(QRS)	TRANSISTOR	
Q601	2SD2114K(UV)	TRANSISTOR	
Q602	2SD2114K(UV)	TRANSISTOR	
Q603	2SD2114K(UV)	TRANSISTOR	
Q604	2SD2114K(UV)	TRANSISTOR	
Q605	2SA1774(QRS)	TRANSISTOR	
Q606	2SC4617(QRS)	TRANSISTOR	
Q701	2SC4617(QRS)	TRANSISTOR	
Q704	2SC4617(QRS)	TRANSISTOR	
Q706	DTC144EE	TRANSISTOR	
	or UN9213	TRANSISTOR	
Q781	DTA143EU	TRANSISTOR	
Q782	2SC4081(R)	TRANSISTOR	
Q783	2SC4081(R)	TRANSISTOR	
Q784	2SC4081(R)	TRANSISTOR	
Q805	XP1216	TRANSISTOR	
	or UMG3N	PAIR TRANSISTOR	
Q810	2SA1774(QRS)	TRANSISTOR	
Q811	2SA1774(QRS)	TRANSISTOR	
Q901	DTC144WU	TRANSISTOR	
Q902	DTA114EU	TRANSISTOR	
Q904	XP1216	TRANSISTOR	
	or UMG3N	PAIR TRANSISTOR	
Q905	XP5601	TRANSISTOR	
Q906	XP5601	TRANSISTOR	
Q907	XP5601	TRANSISTOR	
D2	RD22M(B1-3)-X	ZENER DIODE	
D3	1SS355	DIODE	
D301	MA132WK	DIODE	
D502	DAN222	DIODE	
D503	DAN222	DIODE	
D504	DAN222	DIODE,AX360EG	
D505	DAN222	DIODE	
D901	1SS355	DIODE	
D902	1SS355	DIODE	
D903	1SS355	DIODE	
D904	MA30(A)	DIODE	
D905	RD2.7S(B2)	ZENER DIODE	
D906	1SS355	DIODE	
DA1	DAP202U	DIODE	
DA3	DAP202U	DIODE	
R2	NRSA63J-473X	RESISTOR	47kΩ,1/16W
R4	NRSA63J-473X	RESISTOR	47kΩ,1/16W
R5	NRSA63J-105X	RESISTOR	1MΩ,1/16W
R6	NRSA63J-221X	RESISTOR	220Ω,1/16W
R7	NRSA63J-124X	RESISTOR	120kΩ,1/16W
R8	NRVA63D-623X	CMF RESISTOR	62kΩ,1/16W
R9	NRSA63J-302X	RESISTOR	3kΩ,1/16W
R10	NRVA63D-683X	CMF RESISTOR	68kΩ,1/16W
R11	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R12	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R13	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R14	NRSA63J-474X	RESISTOR	470kΩ,1/16W
R22	NRSA63J-473X	RESISTOR	47kΩ,1/16W
R23	NRSA63J-685X	RESISTOR	6.8MΩ,1/16W
R25	NRSA63J-105X	RESISTOR	1MΩ,1/16W
R26	NRSA63J-221X	RESISTOR	220Ω,1/16W
R27	NRSA63J-122X	RESISTOR	1.2kΩ,1/16W

#△ REF No.	PART No.	PART NAME, DESCRIPTION	
R28	NRSA63J-751X	RESISTOR	750Ω,1/16W
R29	NRSA63J-751X	RESISTOR	750Ω,1/16W
R30	NRSA63J-562X	RESISTOR	5.6kΩ,1/16W
R31	NRSA63J-821X	RESISTOR	820Ω,1/16W
R32	NRSA63J-101X	RESISTOR	100Ω,1/16W
R36	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R37	NRSA63J-683X	RESISTOR	68kΩ,1/16W
R40	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R41	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R43	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R53	NRSA63J-751X	RESISTOR	750Ω,1/16W
R60	NRSA63J-103X	RESISTOR,AX360EG	10kΩ,1/16W
R61	NRSA63J-103X	RESISTOR,AX460EG	10kΩ,1/16W
	NRSA63J-152X	RESISTOR,AX360EG	1.5kΩ,1/16W
R63	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R67	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R69	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R70	NRSA63J-474X	RESISTOR	470kΩ,1/16W
R71	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R72	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R73	NRSA63J-391X	RESISTOR	390Ω,1/16W
R74	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R75	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R201	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R202	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R203	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R204	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R205	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R207	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R208	NRSA63J-273X	RESISTOR	27kΩ,1/16W
R209	NRSA63J-331X	RESISTOR	330Ω,1/16W
R210	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R211	NRSA63J-561X	RESISTOR	560Ω,1/16W
R212	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R213	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R301	NRSA63J-2R2X	RESISTOR	2.2Ω,1/16W
R302	NRSA63J-2R2X	RESISTOR	2.2Ω,1/16W
R303	NRSA63J-2R2X	RESISTOR	2.2Ω,1/16W
R304	NRSA63J-121X	RESISTOR	120Ω,1/16W
R305	NRSA63J-393X	RESISTOR	39kΩ,1/16W
R306	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R307	NRSA63J-154X	RESISTOR	150kΩ,1/16W
R308	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R310	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R311	NRSA63J-333X	RESISTOR	33kΩ,1/16W
R312	NRSA63J-473X	RESISTOR	47kΩ,1/16W
R314	NRS12BK-R68X	RESISTOR	0.68Ω,1/2W
R351	NRSA63J-474X	RESISTOR	470kΩ,1/16W
R352	NRSA63J-154X	RESISTOR	150kΩ,1/16W
R353	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R354	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R355	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R356	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R357	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R358	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R359	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R360	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R361	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R362	NRS12BK-R68X	RESISTOR	0.68Ω,1/2W
R403	NRSA63J-332X	RESISTOR	3.3kΩ,1/16W
R404	NRSA63J-820X	RESISTOR	82Ω,1/16W
R405	NRSA63J-820X	RESISTOR	82Ω,1/16W

#△ REF No.	PART No.	PART NAME, DESCRIPTION	
R406	NRSA63J-820X	RESISTOR	82Ω,1/16W
R409	NRSA63J-100X	RESISTOR	10Ω,1/16W
R410	NRVA63D-103X	CMF RESISTOR	10kΩ,1/16W
R411	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R412	NRSA63J-272X	RESISTOR	2.7kΩ,1/16W
R414	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R415	NRSA63J-132X	RESISTOR	1.3kΩ,1/16W
R417	NRSA63J-822X	RESISTOR	8.2kΩ,1/16W
R418	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R421	NRSA63J-823X	RESISTOR	82kΩ,1/16W
R422	NRSA63J-182X	RESISTOR	1.8kΩ,1/16W
R424	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R425	NRSA63J-334X	RESISTOR	330kΩ,1/16W
R426	NRSA63J-470X	RESISTOR	47Ω,1/16W
R428	NRSA63J-155X	RESISTOR	1.5MΩ,1/16W
R429	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R430	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R431	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R433	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R434	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R436	NRSA63J-561X	RESISTOR	560Ω,1/16W
R437	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R438	NRSA63J-182X	RESISTOR	1.8kΩ,1/16W
R439	NRSA63J-822X	RESISTOR	8.2kΩ,1/16W
R456	NRSA63J-3R3X	RESISTOR	3.3Ω,1/16W
R457	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R459	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R501	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R503	NRSA63J-105X	RESISTOR	1MΩ,1/16W
R504	NRSA63J-154X	RESISTOR	150kΩ,1/16W
R505	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R506	NRSA63J-431X	RESISTOR	430Ω,1/16W
R507	NRSA63J-182X	RESISTOR	1.8kΩ,1/16W
R508	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R509	NRSA63J-152X	RESISTOR	1.5kΩ,1/16W
R510	NRSA63J-331X	RESISTOR	330Ω,1/16W
R511	NRSA63J-122X	RESISTOR	1.2kΩ,1/16W
R513	NRSA63J-182X	RESISTOR	1.8kΩ,1/16W
R518	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R519	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R520	NRSA63J-682X	RESISTOR	6.8kΩ,1/16W
R522	NRVA63D-221X	CMF RESISTOR	220Ω,1/16W
R523	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R524	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R525	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R526	NRSA63J-431X	RESISTOR	430Ω,1/16W
R527	NRSA63J-102X	RESISTOR,AX460EG	1kΩ,1/16W
	NRSA63J-821X	RESISTOR,AX360EG	820Ω,1/16W
R528	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R529	NRSA63J-431X	RESISTOR	430Ω,1/16W
R530	NRSA63J-102X	RESISTOR,AX460EG	1kΩ,1/16W
	NRSA63J-821X	RESISTOR,AX360EG	820Ω,1/16W
R531	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R535	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R536	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R537	NRSA63J-123X	RESISTOR	12kΩ,1/16W
R538	NRSA63J-822X	RESISTOR	8.2kΩ,1/16W
R541	NRSA63J-103X	RESISTOR,AX360EG	10kΩ,1/16W
R543	NRVA63D-221X	CMF RESISTOR	220Ω,1/16W
R546	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R561	NRSA63J-821X	RESISTOR	820Ω,1/16W
R563	NRSA63J-471X	RESISTOR	470Ω,1/16W

#△ REF No.	PART No.	PART NAME, DESCRIPTION	
R564	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R565	NRSA63J-391X	RESISTOR	390Ω,1/16W
R566	NRSA63J-471X	RESISTOR	470Ω,1/16W
R567	NRSA63J-272X	RESISTOR	2.7kΩ,1/16W
R568	NRSA63J-471X	RESISTOR	470Ω,1/16W
R569	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R570	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R571	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R573	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R576	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R577	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R601	NRSA63J-331X	RESISTOR	330Ω,1/16W
R602	NRSA63J-511X	RESISTOR	510Ω,1/16W
R603	NRSA63J-511X	RESISTOR	510Ω,1/16W
R604	NRSA63J-331X	RESISTOR	330Ω,1/16W
R605	NRSA63J-511X	RESISTOR	510Ω,1/16W
R606	NRSA63J-331X	RESISTOR	330Ω,1/16W
R608	NRSA63J-392X	RESISTOR	3.9kΩ,1/16W
R609	NRSA63J-331X	RESISTOR	330Ω,1/16W
R610	NRSA63J-511X	RESISTOR	510Ω,1/16W
R611	NRVA02D-914X	CMF RESISTOR	910kΩ,1/10W
R612	NRSA63J-332X	RESISTOR	3.3kΩ,1/16W
R617	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R619	NRSA63J-513X	RESISTOR	51kΩ,1/16W
R620	NRSA63J-513X	RESISTOR	51kΩ,1/16W
R621	NRSA63J-513X	RESISTOR	51kΩ,1/16W
R623	NRSA63J-561X	RESISTOR	560Ω,1/16W
R624	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R629	NRSA63J-513X	RESISTOR	51kΩ,1/16W
R632	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R633	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R634	NRSA63J-682X	RESISTOR	6.8kΩ,1/16W
R635	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R636	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R637	NRSA63J-221X	RESISTOR	220Ω,1/16W
R701	NRSA63J-821X	RESISTOR	820Ω,1/16W
R702	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R703	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R708	NRSA63J-203X	RESISTOR	20kΩ,1/16W
R711	NRSA63J-122X	RESISTOR	1.2kΩ,1/16W
R720	NRSA63J-822X	RESISTOR	8.2kΩ,1/16W
R721	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R726	NRSA63J-152X	RESISTOR	1.5kΩ,1/16W
R727	NRSA63J-122X	RESISTOR	1.2kΩ,1/16W
R729	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R730	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R731	NRSA63J-821X	RESISTOR	820Ω,1/16W
R732	NRSA63J-821X	RESISTOR	820Ω,1/16W
R733	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R734	NRSA63J-331X	RESISTOR	330Ω,1/16W
R735	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R736	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R741	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R763	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R783	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R784	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R785	NRSA63J-473X	RESISTOR	47kΩ,1/16W
R786	NRSA63J-473X	RESISTOR	47kΩ,1/16W
R787	NRSA63J-5R6X	RESISTOR	5.6Ω,1/16W
R788	NRSA63J-5R6X	RESISTOR	5.6Ω,1/16W
R805	NRSA02J-0R0X	RESISTOR	0Ω,1/10W
R807	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R808	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R809	NRSA63J-224X	RESISTOR	220kΩ,1/16W
R810	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R811	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R812	NRSA63J-224X	RESISTOR	220kΩ,1/16W
R813	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R814	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R815	NRSA63J-333X	RESISTOR	33kΩ,1/16W
R816	NRSA63J-562X	RESISTOR	5.6kΩ,1/16W
R817	NRSA63J-823X	RESISTOR	82kΩ,1/16W
R818	NRSA63J-823X	RESISTOR	82kΩ,1/16W
R819	NRSA63J-333X	RESISTOR	33kΩ,1/16W
R820	NRSA63J-562X	RESISTOR	5.6kΩ,1/16W
R821	NRSA63J-105X	RESISTOR	1MΩ,1/16W
R822	NRSA63J-105X	RESISTOR	1MΩ,1/16W
R853	NRSA63J-333X	RESISTOR	33kΩ,1/16W
R854	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R855	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R861	NRSA63J-183X	RESISTOR	18kΩ,1/16W
R862	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R863	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R864	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R865	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R866	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R867	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R868	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R869	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R870	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R871	NRSA63J-152X	RESISTOR	1.5kΩ,1/16W
R877	NRSA63J-182X	RESISTOR	1.8kΩ,1/16W
R878	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R879	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R880	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R881	NRSA63J-273X	RESISTOR	27kΩ,1/16W
R882	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R883	NRSA63J-561X	RESISTOR	560Ω,1/16W
R885	NRSA63J-122X	RESISTOR	1.2kΩ,1/16W
R887	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R891	NRSA63J-243X	RESISTOR	24kΩ,1/16W
R892	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R893	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R894	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R895	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R896	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R897	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R898	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R899	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R901	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R902	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R903	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R904	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R905	NRSA63J-241X	RESISTOR	240Ω,1/16W
R906	NRSA63J-751X	RESISTOR	750Ω,1/16W
R907	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R908	NRSA63J-682X	RESISTOR	6.8kΩ,1/16W
R909	NRSA63J-272X	RESISTOR	2.7kΩ,1/16W
R910	NRSA63J-122X	RESISTOR	1.2kΩ,1/16W
R912	NRSA63J-684X	RESISTOR	680kΩ,1/16W
R913	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R914	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R915	NRSA63J-183X	RESISTOR	18kΩ,1/16W
R916	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W

#⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
R917	NRSA63J-683X	RESISTOR	68kΩ,1/16W
R918	NRSA63J-512X	RESISTOR	5.1kΩ,1/16W
R919	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R920	NRSA63J-183X	RESISTOR	18kΩ,1/16W
R921	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R922	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R923	NRSA63J-473X	RESISTOR	47kΩ,1/16W
R924	NRSA63J-333X	RESISTOR	33kΩ,1/16W
R925	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R926	NRSA63J-272X	RESISTOR	2.7kΩ,1/16W
R927	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R928	NRSA63J-101X	RESISTOR	100Ω,1/16W
R930	NRSA63J-183X	RESISTOR	18kΩ,1/16W
R931	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R932	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R933	NRSA63J-824X	RESISTOR	820kΩ,1/16W
R934	NRSA63J-822X	RESISTOR	8.2kΩ,1/16W
R935	NRSA63J-152X	RESISTOR	1.5kΩ,1/16W
R936	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R937	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R938	NRSA63J-154X	RESISTOR	150kΩ,1/16W
R939	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R940	NRSA63J-334X	RESISTOR	330kΩ,1/16W
R941	NRSA63J-564X	RESISTOR	560kΩ,1/16W
R942	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R945	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R946	NRSA63J-473X	RESISTOR	47kΩ,1/16W
R947	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R948	NRSA63J-101X	RESISTOR	100Ω,1/16W
R949	NRSA63J-105X	RESISTOR	1MΩ,1/16W
R950	NRSA63J-473X	RESISTOR	47kΩ,1/16W
R951	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R952	NRSA63J-183X	RESISTOR	18kΩ,1/16W
R954	NRSA63J-272X	RESISTOR	2.7kΩ,1/16W
R956	NRSA63J-393X	RESISTOR	39kΩ,1/16W
R957	NRSA63J-562X	RESISTOR	5.6kΩ,1/16W
R958	NRSA63J-682X	RESISTOR	6.8kΩ,1/16W
R959	NRSA63J-562X	RESISTOR	5.6kΩ,1/16W
R960	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R961	NRSA63J-105X	RESISTOR	1MΩ,1/16W
R963	NRSA63J-391X	RESISTOR	390Ω,1/16W
R965	NRSA63J-3R9X	RESISTOR	3.9Ω,1/16W
R966	NRSA63J-3R9X	RESISTOR	3.9Ω,1/16W
R970	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R971	NRSA63J-3R9X	RESISTOR	3.9Ω,1/16W
R972	NRSA63J-3R9X	RESISTOR	3.9Ω,1/16W
R974	NRSA63J-331X	RESISTOR	330Ω,1/16W
R975	NRSA63J-331X	RESISTOR	330Ω,1/16W
R978	NRSA63J-334X	RESISTOR	330kΩ,1/16W
R979	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R980	NRSA63J-562X	RESISTOR	5.6kΩ,1/16W
R981	NRSA63J-821X	RESISTOR	820Ω,1/16W
R982	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R984	NRSA63J-183X	RESISTOR	18kΩ,1/16W
R985	NRSA63J-912X	RESISTOR	9.1kΩ,1/16W
RA1	NRZ0011-104X	NETWORK RESISTOR	100kΩ
RA2	NRZ0011-105X	NETWORK RESISTOR	1MΩ
RA3	NRZ0014-105X	NETWORK RESISTOR	1MΩ
RA4	NRZ0011-472X	NETWORK RESISTOR	4.7kΩ
RA6	NRZ0014-222X	NETWORK RESISTOR	2.2kΩ
RA7	NRZ0014-222X	NETWORK RESISTOR	2.2kΩ
RA8	NRZ0014-473X	NETWORK RESISTOR	47kΩ

#⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
RA9	NRZ0014-104X	NETWORK RESISTOR	100kΩ
RA10	NRZ0014-222X	NETWORK RESISTOR	2.2kΩ
RA11	NRZ0011-222X	NETWORK RESISTOR	2.2kΩ
RA12	NRZ0014-103X	NETWORK RESISTOR	10kΩ
RA13	NRZ0014-222X	NETWORK RESISTOR	2.2kΩ
RA14	NRZ0011-103X	NETWORK RESISTOR	10kΩ
RA15	NRZ0011-222X	NETWORK RESISTOR	2.2kΩ
RA16	NRZ0011-103X	NETWORK RESISTOR	10kΩ
RA501	NRZ0014-102X	NETWORK RESISTOR	1kΩ
RA801	NRZ0011-222X	NETWORK RESISTOR	2.2kΩ
RA802	NRZ0011-472X	NETWORK RESISTOR	4.7kΩ
RA901	NRZ0011-103X	NETWORK RESISTOR	10kΩ
RA902	NRZ0014-102X	NETWORK RESISTOR	1kΩ
RA903	NRZ0014-102X	NETWORK RESISTOR	1kΩ
RA904	NRZ0011-473X	NETWORK RESISTOR	47kΩ
RA905	NRZ0011-331X	NETWORK RESISTOR	330Ω
RA909	NRZ0011-103X	NETWORK RESISTOR	10kΩ
RA910	NRZ0014-472X	NETWORK RESISTOR	4.7kΩ
C1	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C2	NEA71CM-106X	E CAPACITOR	10μF,16V
C3	NEA70JM-226X	E CAPACITOR	22μF,6.3V
C4	NCB31EK-103X	CAPACITOR	0.01μF,25V
C5	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C6	NEA70JM-476X	E CAPACITOR	47μF,6.3V
C8	NCB31HK-102X	CAPACITOR	0.001μF,50V
C9	NDC31HJ-101X	CAPACITOR	100pF,50V
C10	NDC31HJ-270X	CAPACITOR	27pF,50V
C11	NDC31HJ-101X	CAPACITOR	100pF,50V
C12	NCB31EK-103X	CAPACITOR	0.01μF,25V
C14	NCB31EK-472X	CAPACITOR	0.0047μF,25V
C15	NCB31EK-103X	CAPACITOR	0.01μF,25V
C18	NDC31HJ-180X	CAPACITOR	18pF,50V
C19	NDC31HJ-180X	CAPACITOR	18pF,50V
C21	NDC31HJ-100X	CAPACITOR	10pF,50V
C22	NDC31HJ-120X	CAPACITOR	12pF,50V
C24	NCF21CZ-105X	CAPACITOR	1μF,16V
C25	NCB31EK-103X	CAPACITOR	0.01μF,25V
C26	NCB31EK-103X	CAPACITOR	0.01μF,25V
C27	NCB31EK-103X	CAPACITOR	0.01μF,25V
C30	NCB31HK-102X	CAPACITOR	0.001μF,50V
C201	NCF21CZ-474X	CAPACITOR	0.47μF,16V
C203	NCB31CK-333X	CAPACITOR	0.033μF,16V
C205	NCB31HK-562X	CAPACITOR	0.0056μF,50V
C206	NCB21CK-154X	CAPACITOR	0.15μF,16V
C207	NEA70JM-226X	E CAPACITOR	22μF,6.3V
C208	NEA70JM-226X	E CAPACITOR	22μF,6.3V
C209	NEA71HM-105X	E CAPACITOR	1μF,50V
C210	NEA71HM-105X	E CAPACITOR	1μF,50V
C212	NCB21EK-104X	CAPACITOR	0.1μF,25V
C213	NCB21EK-104X	CAPACITOR	0.1μF,25V
C214	NEA71CM-106X	E CAPACITOR	10μF,16V
C215	NDC31HJ-101X	CAPACITOR	100pF,50V
C301	NCF11CZ-225X	CAPACITOR	2.2μF,16V
C302	NCF11CZ-225X	CAPACITOR	2.2μF,16V
C303	NCF11CZ-225X	CAPACITOR	2.2μF,16V
C304	NEA71HM-105X	E CAPACITOR	1μF,50V
C305	NCB31HK-681X	CAPACITOR	680pF,50V
C306	NCB31EK-103X	CAPACITOR	0.01μF,25V
C307	NCF21CZ-105X	CAPACITOR	1μF,16V
C308	NCB31HK-331X	CAPACITOR	330pF,50V
C309	NCB21EK-104X	CAPACITOR	0.1μF,25V
C312	NCB31HK-332X	CAPACITOR	0.0033μF,50V

:△ REF No.	PART No.	PART NAME, DESCRIPTION	
C313	NCB31CK-473X	CAPACITOR	0.047μF,16V
C314	NCB31EK-103X	CAPACITOR	0.01μF,25V
C315	NCB21EK-104X	CAPACITOR	0.1μF,25V
C316	NEA71CM-106X	E CAPACITOR	10μF,16V
C351	NCF21EZ-224X	CAPACITOR	0.22μF,25V
C352	NCF21EZ-224X	CAPACITOR	0.22μF,25V
C353	NCF21EZ-224X	CAPACITOR	0.22μF,25V
C354	NCB31EK-223X	CAPACITOR	0.022μF,25V
C355	NCB31EK-223X	CAPACITOR	0.022μF,25V
C356	NCB31EK-223X	CAPACITOR	0.022μF,25V
C357	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C358	NCB21CK-124X	CAPACITOR	0.12μF,16V
C359	NCB21CK-124X	CAPACITOR	0.12μF,16V
C360	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C363	NBE20JM-475X	E CAPACITOR	4.7μF,6.3V
C401	NDC31HJ-331X	CAPACITOR	330pF,50V
C402	NEZ0012-476X	E CAPACITOR	47μF
C404	NCF21CZ-105X	CAPACITOR	1μF,16V
C405	NCB31HK-152X	CAPACITOR	0.0015μF,50V
C407	NCB31HK-152X	CAPACITOR	0.0015μF,50V
C409	NCB31HK-681X	CAPACITOR	680pF,50V
C410	NBE21CM-105X	E CAPACITOR	1μF,16V
C411	NCB31EK-103X	CAPACITOR	0.01μF,25V
C412	NEZ0012-476X	E CAPACITOR	47μF
C414	NBE21CM-105X	E CAPACITOR	1μF,16V
C415	NCB21EK-683X	CAPACITOR	0.068μF,25V
C419	NEA70GM-476X	E CAPACITOR	47μF,4.0V
C420	NEA70GM-476X	E CAPACITOR	47μF,4.0V
C422	NBE20JM-475X	E CAPACITOR	4.7μF,6.3V
C423	NEA70JM-226X	E CAPACITOR	22μF,6.3V
C425	NEZ0012-476X	E CAPACITOR	47μF
C427	NBE21CM-105X	E CAPACITOR	1μF,16V
C428	NCB31EK-223X	CAPACITOR	0.022μF,25V
C429	NBE21DM-474X	E CAPACITOR	0.47μF,20V
C431	NCB31EK-472X	CAPACITOR	0.0047μF,25V
C432	NCF21CZ-105X	CAPACITOR	1μF,16V
C437	NFV41HJ-273X	F CAPACITOR	0.027μF,50V
C438	NDC31HJ-471X	CAPACITOR	470pF,50V
C439	NCB31EK-682X	CAPACITOR	0.0068μF,25V
C440	NBE41AM-226X	E CAPACITOR	22μF,10V
C501	NEA70JM-476X	E CAPACITOR	47μF,6.3V
C502	NEA71HM-335X	E CAPACITOR	3.3μF,50V
C503	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C504	NEA71HM-225X	E CAPACITOR	2.2μF,50V
C505	NEA70GM-476X	E CAPACITOR	47μF,4.0V
C506	NCB31CK-104X	CAPACITOR	0.1μF,16V
C507	NCB31HK-332X	CAPACITOR	0.0033μF,50V
C508	NCF21CZ-105X	CAPACITOR	1μF,16V
C509	NCF21CZ-105X	CAPACITOR	1μF,16V
C510	NCF21CZ-105X	CAPACITOR	1μF,16V
C511	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C512	NDC31HJ-330X	CAPACITOR	33pF,50V
C513	NCS31HJ-561X	CAPACITOR	560pF,50V
C514	NCS21HJ-561X	CAPACITOR	560pF,50V
C515	NDC31HJ-560X	CAPACITOR	56pF,50V
C516	NDC31HJ-150X	CAPACITOR	15pF,50V
C518	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C519	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C520	NEA70JM-476X	E CAPACITOR	47μF,6.3V
C521	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C523	NCB31EK-153X	CAPACITOR	0.015μF,25V
C524	NDC31HJ-221X	CAPACITOR	220pF,50V

#△ REF No.	PART No.	PART NAME, DESCRIPTION	
C525	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C526	NDC31HJ-220X	CAPACITOR	22pF,50V
C528	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C529	NCB31EK-103X	CAPACITOR	0.01μF,25V
C530	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C531	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C532	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C533	NBE20JM-225X	E CAPACITOR	2.2μF,6.3V
C534	NBE20JM-475X	E CAPACITOR	4.7μF,6.3V
C535	NCB31EK-103X	CAPACITOR	0.01μF,25V
C536	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C537	NCF21CZ-105X	CAPACITOR	1μF,16V
C538	NCB31HK-122X	CAPACITOR	0.0012μF,50V
C540	NCB31EK-103X	CAPACITOR	0.01μF,25V
C541	NBE20JM-106X	E CAPACITOR	10μF,6.3V
C542	NCB31CK-104X	CAPACITOR	0.1μF,16V
C543	NCB31CK-104X	CAPACITOR	0.1μF,16V
C549	NDC31HG-221X	CAPACITOR	220pF,50V
C561	NCB31HK-102X	CAPACITOR	0.001μF,50V
C562	NEA70JM-226X	E CAPACITOR	22μF,6.3V
C563	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C564	NCB31CK-104X	CAPACITOR	0.1μF,16V
C565	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C566	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C567	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C568	NCB31CK-104X	CAPACITOR	0.1μF,16V
C569	NCB31CK-104X	CAPACITOR	0.1μF,16V
C570	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C571	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C572	NCB31HK-102X	CAPACITOR	0.001μF,50V
C573	NCB31HK-102X	CAPACITOR	0.001μF,50V
C574	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C575	NDC31HJ-220X	CAPACITOR	22pF,50V
C576	NDC31HJ-5R0X	CAPACITOR	5pF,50V
C577	NDC31HJ-121X	CAPACITOR	120pF,50V
C578	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C579	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C601	NEA70JM-476X	E CAPACITOR	47μF,6.3V
C602	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C603	NCB31EK-103X	CAPACITOR	0.01μF,25V
C604	NDC31HJ-100X	CAPACITOR	10pF,50V
C605	NCB31CK-104X	CAPACITOR	0.1μF,16V
C607	NCB31EK-103X	CAPACITOR	0.01μF,25V
C608	NCB31EK-103X	CAPACITOR	0.01μF,25V
C609	NCB31CK-104X	CAPACITOR	0.1μF,16V
C610	NDC31HJ-100X	CAPACITOR	10pF,50V
C611	NDC31HJ-4R0X	CAPACITOR	4pF,50V
C612	NCB31EK-103X	CAPACITOR	0.01μF,25V
C613	NCB31EK-103X	CAPACITOR	0.01μF,25V
C614	NCB31CK-104X	CAPACITOR	0.1μF,16V
C616	NDC31HJ-100X	CAPACITOR	10pF,50V
C617	NCB31EK-103X	CAPACITOR	0.01μF,25V
C619	NCB31HK-102X	CAPACITOR	0.001μF,50V
C621	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C623	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C624	NCF21CZ-105X	CAPACITOR	1μF,16V
C625	NCB31EK-103X	CAPACITOR	0.01μF,25V
C626	NDC31HJ-150X	CAPACITOR	15pF,50V
C627	NCB31CK-104X	CAPACITOR	0.1μF,16V
C629	NCB31EK-103X	CAPACITOR	0.01μF,25V
C630	NCB31EK-103X	CAPACITOR	0.01μF,25V
C631	NCB31CK-104X	CAPACITOR	0.1μF,16V

#⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
C632	NDC31HJ-101X	CAPACITOR	100pF,50V
C634	NCB31HK-102X	CAPACITOR	0.001μF,50V
C637	NCB31HK-682X	CAPACITOR	0.0068μF,50V
C639	NDC31HJ-560X	CAPACITOR	56pF,50V
C640	NDC31HJ-221X	CAPACITOR	220pF,50V
C641	NDC31HJ-680X	CAPACITOR	68pF,50V
C642	NDC31HJ-820X	CAPACITOR	82pF,50V
C643	NDC31HJ-270X	CAPACITOR	27pF,50V
C644	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C701	NEA70JM-476X	E CAPACITOR	47μF,6.3V
C702	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C703	NDC31HJ-270X	CAPACITOR	27pF,50V
C705	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C706	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C710	NDC31HJ-330X	CAPACITOR	33pF,50V
C711	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C712	NDC31HJ-100X	CAPACITOR	10pF,50V
C715	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C718	NDC31HJ-101X	CAPACITOR	100pF,50V
C719	NDC31HJ-680X	CAPACITOR	68pF,50V
C720	NDC31HJ-181X	CAPACITOR	180pF,50V
C722	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C781	NDC31HJ-5R0X	CAPACITOR	5pF,50V
C782	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C783	NDC31HJ-181X	CAPACITOR	180pF,50V
C784	NDC31HJ-181X	CAPACITOR	180pF,50V
C785	NDC21HJ-271X	CAPACITOR	270pF,50V
C786	NDC21HJ-681X	CAPACITOR	680pF,50V
C801	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C802	NEA71CM-106X	E CAPACITOR	10μF,16V
C803	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C804	NCB31CK-104X	CAPACITOR	0.1μF,16V
C805	NCB11CK-105X	CAPACITOR	1μF,16V
C806	NCB11CK-105X	CAPACITOR	1μF,16V
C807	NCB31CK-104X	CAPACITOR	0.1μF,16V
C808	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C816	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C817	NCB31CK-473X	CAPACITOR	0.047μF,16V
C818	NCB31CK-473X	CAPACITOR	0.047μF,16V
C823	NEA71CM-106X	E CAPACITOR	10μF,16V
C831	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C832	NCB31CK-473X	CAPACITOR	0.047μF,16V
C833	NCB31CK-473X	CAPACITOR	0.047μF,16V
C834	NCB31CK-104X	CAPACITOR	0.1μF,16V
C835	NCB31CK-104X	CAPACITOR	0.1μF,16V
C836	NCB31CK-104X	CAPACITOR	0.1μF,16V
C837	NCB31CK-104X	CAPACITOR	0.1μF,16V
C838	NCF21CZ-474X	CAPACITOR	0.47μF,16V
C839	NCF21CZ-474X	CAPACITOR	0.47μF,16V
C840	NCB31CK-473X	CAPACITOR	0.047μF,16V
C841	NCB31CK-473X	CAPACITOR	0.047μF,16V
C842	NCB31CK-104X	CAPACITOR	0.1μF,16V
C843	NEA71CM-106X	E CAPACITOR	10μF,16V
C844	NCB31CK-104X	CAPACITOR	0.1μF,16V
C845	NCB31CK-104X	CAPACITOR	0.1μF,16V
C846	NCB31CK-473X	CAPACITOR	0.047μF,16V
C847	NCB31CK-473X	CAPACITOR	0.047μF,16V
C848	NCB31CK-104X	CAPACITOR	0.1μF,16V
C850	NCF21CZ-105X	CAPACITOR	1μF,16V
C851	NCB31CK-104X	CAPACITOR	0.1μF,16V
C852	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C853	NCB31CK-104X	CAPACITOR	0.1μF,16V

#⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
C854	NEA71CM-106X	E CAPACITOR	10μF,16
C855	NDC31HJ-100X	CAPACITOR	10pF,50
C856	NDC31HJ-270X	CAPACITOR	27pF,50
C857	NDC31HJ-330X	CAPACITOR	33pF,50
C858	NEA70JM-476X	E CAPACITOR	47μF,6.3
C859	NDC31HJ-121X	CAPACITOR	120pF,50
C901	NDC31HJ-470X	CAPACITOR	47pF,50
C902	NDC31HJ-331X	CAPACITOR	330pF,50
C903	NCB31CK-473X	CAPACITOR	0.047μF,16
C905	NCB31HK-681X	CAPACITOR	680pF,50
C906	NDC31HJ-221X	CAPACITOR	220pF,50
C907	NCB31CK-473X	CAPACITOR	0.047μF,16
C908	NCB31CK-473X	CAPACITOR	0.047μF,16
C909	NCB31CK-473X	CAPACITOR	0.047μF,16
C910	NCB31EK-223X	CAPACITOR	0.022μF,25
C912	NCB31CK-473X	CAPACITOR	0.047μF,16
C913	NCB31HK-102X	CAPACITOR	0.001μF,50
C914	NCF21CZ-105X	CAPACITOR	1μF,16
C915	NCB31CK-473X	CAPACITOR	0.047μF,16
C916	NDC31HJ-5R0X	CAPACITOR	5pF,50
C917	NCB31EK-223X	CAPACITOR	0.022μF,25
C918	NCB31CK-104X	CAPACITOR	0.1μF,16
C920	NCB31EK-103X	CAPACITOR	0.01μF,25
C921	NDC31HJ-220X	CAPACITOR	22pF,50
C922	NCB31CK-473X	CAPACITOR	0.047μF,16
C923	NCB31EK-103X	CAPACITOR	0.01μF,25
C924	NDC31HJ-151X	CAPACITOR	150pF,50
C925	NCB31EK-103X	CAPACITOR	0.01μF,25
C926	NDC31HJ-121X	CAPACITOR	120pF,50
C927	NCB31EK-103X	CAPACITOR	0.01μF,25
C928	NCB31CK-273X	CAPACITOR	0.027μF,16
C929	NCB31CK-273X	CAPACITOR	0.027μF,16
C930	NCF31CZ-104X	CAPACITOR	0.1μF,16
C932	NCB31CK-273X	CAPACITOR	0.027μF,16
C934	NCB31CK-473X	CAPACITOR	0.047μF,16
C935	NCF31CZ-104X	CAPACITOR	0.1μF,16
C936	NEA71CM-106X	E CAPACITOR	10μF,16
C937	NCB31EK-153X	CAPACITOR	0.015μF,25
C938	NCF31CZ-104X	CAPACITOR	0.1μF,16
C939	NBE20JM-106X	E CAPACITOR	10μF,6.3
C940	NCB31EK-183X	CAPACITOR	0.018μF,25
C941	NCB21EK-183X	CAPACITOR	0.018μF,25
C942	NCF31CZ-104X	CAPACITOR	0.1μF,16
C943	NBE20JM-106X	E CAPACITOR	10μF,6.3
C944	NCB31CK-104X	CAPACITOR	0.1μF,16
C945	NCF31CZ-104X	CAPACITOR	0.1μF,16
C946	NCF31CZ-104X	CAPACITOR	0.1μF,16
C947	NBE20JM-106X	E CAPACITOR	10μF,6.3
C948	NCF31CZ-104X	CAPACITOR	0.1μF,16
C949	NCF31CZ-104X	CAPACITOR	0.1μF,16
C952	NCF31CZ-104X	CAPACITOR	0.1μF,16
C953	NEA71CM-106X	E CAPACITOR	10μF,16
C954	NCF31CZ-104X	CAPACITOR	0.1μF,16
C955	NCB21CK-224X	CAPACITOR	0.22μF,16
C956	NCB21CK-473X	CAPACITOR	0.047μF,16
C957	NCF31CZ-104X	CAPACITOR	0.1μF,16
C958	NCF31CZ-104X	CAPACITOR	0.1μF,16
C959	NCB31EK-103X	CAPACITOR	0.01μF,25
C961	NEA71CM-106X	E CAPACITOR	10μF,16
C962	NCF31CZ-104X	CAPACITOR	0.1μF,16
C963	NCB31HK-332X	CAPACITOR	0.0033μF,50
C965	NCB31EK-472X	CAPACITOR	0.0047μF,25

⚠	REF No.	PART No.	PART NAME, DESCRIPTION	
	C966	NCB31EK-472X	CAPACITOR	0.0047μF,25V
	C972	NCB31HK-332X	CAPACITOR	0.0033μF,50V
	C974	NCB31EK-472X	CAPACITOR	0.0047μF,25V
	C975	NCB31EK-472X	CAPACITOR	0.0047μF,25V
	C981	NBE51DM-226X	E CAPACITOR	22μF,20V
	C982	NCF31CZ-104X	CAPACITOR	0.1μF,16V
	C983	NEA70JM-226X	E CAPACITOR	22μF,6.3V
	C984	NEA71CM-106X	E CAPACITOR	10μF,16V
	C985	NCF31CZ-104X	CAPACITOR	0.1μF,16V
	L1	PU58201-100J	COIL	10μH
	L401	PELN0755-P	OSC TRANSFORMER	
	L402	YU40740-101K	COIL	100μH
	L501	YU41135-220K	COIL	22μH
	L502	YU41134-221JY	COIL	220μH
	L503	YU40740-470K	COIL	47μH
	L504	YU41134-330JY	COIL	33μH
	L507	YU41134-100JY	COIL	10μH
	L510	YU40740-100KY	COIL	10μH
	L511	YU41134-220J	COIL	22μH
	L601	YU40740-470K	COIL	47μH
	L605	YU41134-271JY	COIL	270μH
	L606	YU41134-220J	COIL	22μH
	L701	YU40740-470K	COIL	47μH
	L702	YU41134-560JY	COIL	56μH
	L704	YU41134-390J	COIL	39μH
	L705	YU41134-181JY	COIL	180μH
	L781	YU40740-470K	COIL	47μH
	L782	YU41134-1R2MY	COIL	1.2μH
	L783	YU41368	CHIP OSC COIL	
	L801	YU40740-220K	COIL	22μH
	L802	YU40740-220K	COIL	22μH
	L805	YU40740-220K	COIL	22μH
	L806	YU40740-470K	COIL	47μH
	L901	YU41134-181JY	COIL	180μH
	L902	YU41134-270JY	COIL	27μH
	L903	YU41134-151JY	COIL	150μH
	L904	YU41135-220K	COIL	22μH
	L905	YU41135-220K	COIL	22μH
	L906	YU41135-220K	COIL	22μH
	L907	YU41135-220K	COIL	22μH
	L908	YU41135-220K	COIL	22μH
	L909	YU41134-221JY	COIL	220μH
	X1	PEVB0588	CRYSTAL RESONATOR	
	X2	YU40141	CRYSTAL RESONATOR	
	X501	PEVB0616	CRYSTAL RESONATOR	
	X901	PEVB0572-Z	CRYSTAL RESONATOR	
	SLD1	YQ44197	SHIELD CASE	
	SLD2	YQ44119	SHIELD PLATE	
	CN1	PEMC0855-014-R	CONNECTOR	
	CN2	PEMC0855-011-R	CONNECTOR	
	CN3	PEMC0855-018-R	CONNECTOR	
	CN4	YU41356-2-P	CONNECTOR	
	CN6	YU41356-2-P	CONNECTOR	
	CN7	PEMC0855-016-R	CONNECTOR	
	CN8	PEMC0855-011-R	CONNECTOR	
	CN9	PEMC1073-003-P	CONNECTOR,AX460EG	
	CN10	PEMC0855-018-R	CONNECTOR	
	CN11	PEMC0880-022-R	CONNECTOR	
	CN12	PEMC0880-028-X	CONNECTOR	
	CN13	PEMC0934-013-R	CONNECTOR	
	CN14	PEMC0855-010-R	CONNECTOR	
	CN15	PEMC0987-048-X	CONNECTOR	
	CN20	PEMC0987-030-R	CONNECTOR	

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REAR BOARD ASSEMBLY <02>

#⚠	REF No.	PART No.	PART NAME, DESCRIPTION	
	PWBA	YB20750C1-02	REAR BOARD ASSY,AX360EG	
		YB20750F1-02	REAR BOARD ASSY,AX460EG	
		YB20750B1-02	REAR BOARD ASSY,AX260EG	
	IC1	MB3785APFV	IC	
	IC2	MM1165GM	IC	
	Q1	DTA143EU	TRANSISTOR	
	Q3	2SB1302(ST)	TRANSISTOR	
	Q4	2SB1302(ST)	TRANSISTOR	
	Q5	DTC143EU	TRANSISTOR	
	Q6	MPL1	TRANSISTOR	
	Q7	2SB1121(TU)	TRANSISTOR	
	Q9	DTC143EU	TRANSISTOR	
⚠	Q201	2SB1308(QR)	TRANSISTOR,AX460EG	
	Q202	DTC124EU	TRANSISTOR,AX460EG	
	Q203	2SB1302(ST)	TRANSISTOR	
	Q204	DTC143EU	TRANSISTOR	
	Q205	2SB1308(QR)	TRANSISTOR,AX460EG	
	D1	MA736	SB DIODE	
	D2	DWA010	SB DIODE	
	D3	DAN202U	DIODE	
	D101	MA8068	DIODE	
⚠	D201	MA704	DIODE	
	R3	NRVA63D-103X	CMF RESISTOR	10kΩ,1/16W
	R4	NRVA63D-103X	CMF RESISTOR	10kΩ,1/16W
	R5	NRVA63D-823X	CMF RESISTOR	82kΩ,1/16W
	R6	NRVA63D-223X	CMF RESISTOR	22kΩ,1/16W
	R7	NRVA63D-682X	CMF RESISTOR	6.8kΩ,1/16W
	R8	NRVA63D-512X	CMF RESISTOR	5.1kΩ,1/16W
	R9	NRVA63D-103X	CMF RESISTOR	10kΩ,1/16W
	R10	NRVA63D-103X	CMF RESISTOR	10kΩ,1/16W
	R11	NRSA63J-274X	RESISTOR	270kΩ,1/16W
	R12	NRSA63J-104X	RESISTOR	100kΩ,1/16W
	R18	NRSA63J-102X	RESISTOR	1kΩ,1/16W
	R19	NRSA63J-471X	RESISTOR	470Ω,1/16W
	R20	NRSA63J-391X	RESISTOR	390Ω,1/16W
	R21	NRSA63J-470X	RESISTOR	47Ω,1/16W
	R22	NRVA63D-303X	CMF RESISTOR	30kΩ,1/16W
	R23	NRVA63D-103X	CMF RESISTOR	10kΩ,1/16W
	R24	NRSA63J-103X	RESISTOR	10kΩ,1/16W
	R25	NRSA63J-471X	RESISTOR	470Ω,1/16W
	R26	NRVA63D-243X	CMF RESISTOR	24kΩ,1/16W
	R27	NRVA63D-332X	CMF RESISTOR	3.3kΩ,1/16W
	R28	NRSA63J-682X	RESISTOR	6.8kΩ,1/16W
	R29	NRVA63D-333X	CMF RESISTOR	33kΩ,1/16W
	R30	NRVA63D-302X	CMF RESISTOR	3kΩ,1/16W
	R31	NRSA63J-103X	RESISTOR	10kΩ,1/16W
	R32	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
	R35	NRSA63J-471X	RESISTOR	470Ω,1/16W
	R37	NRSA63J-223X	RESISTOR	22kΩ,1/16W
	R102	NRSA02J-102X	RESISTOR	1kΩ,1/10W
	R104	NRSA63J-682X	RESISTOR,AX460EG	6.8kΩ,1/16W
	R105	NRSA63J-623X	RESISTOR,AX460EG	62kΩ,1/16W
	R106	NRSA63J-0R0X	RESISTOR,AX260EG/AX360EG	0Ω,1/16W

#⚠	REF No.	PART No.	PART NAME, DESCRIPTION	
		NRSA63J-152X	RESISTOR,AX460EG	1.5kΩ,1/16W
	R107	NRSA63J-203X	RESISTOR	20kΩ,1/16W
	R108	NRSA63J-152X	RESISTOR,AX460EG	1.5kΩ,1/16W
	R109	NRVA02D-680X	CMF RESISTOR	68Ω,1/10W
	R201	NRSA63J-103X	RESISTOR,AX460EG	10kΩ,1/16W
	R202	NRSA63J-122X	RESISTOR,AX460EG	1.2kΩ,1/16W
	R203	NRSA63J-103X	RESISTOR,AX460EG	10kΩ,1/16W
	R204	NRSA63J-103X	RESISTOR	10kΩ,1/16W
	R205	NRSA63J-561X	RESISTOR	560Ω,1/16W
⚠	R206	NRSA63J-102X	RESISTOR	1kΩ,1/16W
	R208	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
	C1	NCB11CK-105X	CAPACITOR	1μF,16V
	C2	NCB11CK-105X	CAPACITOR	1μF,16V
	C3	NCB11CK-105X	CAPACITOR	1μF,16V
	C5	NCB11CK-105X	CAPACITOR	1μF,16V
	C6	NCB11CK-105X	CAPACITOR	1μF,16V
	C7	NCB11CK-105X	CAPACITOR	1μF,16V
	C8	NCB11CK-105X	CAPACITOR	1μF,16V
	C9	NCS31HJ-561X	CAPACITOR	560pF,50V
	C10	NCB31HK-102X	CAPACITOR	0.001μF,50V
	C11	NCB31HK-472X	CAPACITOR	0.0047μF,50V
	C12	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C13	NCB21CK-224X	CAPACITOR	0.22μF,16V
	C14	NDC31HJ-431X	CAPACITOR	430pF,50V
	C15	NCF21EZ-104X	CAPACITOR	0.1μF,25V
	C17	NCB21EK-104X	CAPACITOR	0.1μF,25V
	C18	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C20	NCS31HJ-561X	CAPACITOR	560pF,50V
	C23	NCB31HK-472X	CAPACITOR	0.0047μF,50V
	C24	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C25	NCB31EK-223X	CAPACITOR	0.022μF,25V
	C26	NCB11CK-105X	CAPACITOR	1μF,16V
	C27	NCB11CK-105X	CAPACITOR	1μF,16V
	C29	NCB11CK-105X	CAPACITOR	1μF,16V
	C30	NEH81CM-226X	E CAPACITOR	22μF,16V
	C32	NCB11CK-105X	CAPACITOR	1μF,16V
	C33	QEDL1CM-476	E CAPACITOR	47μF,16V
	C34	NCB31HK-332X	CAPACITOR	0.0033μF,50V
	C35	NCB11CK-105X	CAPACITOR	1μF,16V
	C36	NCB11CK-105X	CAPACITOR	1μF,16V
	C37	NCB11CK-105X	CAPACITOR	1μF,16V
	C40	NEH81CM-226X	E CAPACITOR	22μF,16V
	C41	NCB11CK-105X	CAPACITOR	1μF,16V
	C42	NCB21EK-104X	CAPACITOR	0.1μF,25V
	C45	NCB11CK-105X	CAPACITOR	1μF,16V
	C46	NCB11CK-105X	CAPACITOR	1μF,16V
	C49	NEA70JM-226X	E CAPACITOR	22μF,6.3V
	C101	NEA50GM-337X	E CAPACITOR	330μF,4.0V
	C102	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C201	NEA71CM-106X	E CAPACITOR,AX460EG	10μF,16V
	C202	NEA50JM-227X	E CAPACITOR	220μF,6.3V
	L1	PELN1099-100MP	COIL	10μH
	L2	PELN1099-100MP	COIL	10μH
	L3	PELN1099-390MP	COIL	39μH
	L4	PELN1099-100MP	COIL	10μH
	L5	PELN1099-470MP	COIL	47μH
	L6	PELN0325-150KZ	COIL	15μH
	L7	PELN0325-330KZ	COIL	33μH
	L8	PELN0325-330KZ	COIL	33μH
	L9	YU40740-220K	COIL	22μH
	SW1	PESW0605-02-R	PUSH SWITCH	
	SW2	PESW0675	SLIDE SWITCH,AX460EG	

#⚠	REF No.	PART No.	PART NAME, DESCRIPTION
	SW3	PESW0662	SLIDE SWITCH,AX460EG
	T1	PELN1045-Z	SW TRANS
	J1	YQ32226	PIN JACK
	J2	PEMC1091	MINI JACK
	OT1	YQ43087	KNOB(APS),AX460EG
	OT2	YQ43806-2	KNOB(LIGHT),AX460EG
⚠	TML1	YQ31792	BATTETY TERMINAL UNIT
	TML2	YQ31793	BATTERY TERMINAL UNIT
	CN1	PEMC0988-048-X	CONNECTOR
	CN3	PEMC1073-004-R	CONNECTOR
	CN4	PEMC1073-002-P	CONNECTOR,AX460EG
	CN5	PEMC1073-005-R	CONNECTOR
⚠	CP1	ICP-S1.8-X	CIRCUIT PROTECTOR,AX460EG
⚠	CP2	ICP-S1.8-X	CIRCUIT PROTECTOR
⚠	CP3	ICP-S1.8-X	CIRCUIT PROTECTOR
⚠	CP4	ICP-S0.5-X	CIRCUIT PROTECTOR
⚠	CP5	ICP-S0.5-X	CIRCUIT PROTECTOR,AX360EG

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SENSOR BOARD ASSEMBLY <05>

PWBA	YU42052-1-6	SENSOR BOARD ASSY

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CCD BOARD ASSEMBLY <06>

PWBA	YB20746B-01-SS	CCD BOARD ASSY	
IC201	UPD16510GR	IC	
IC202	JCY0035	IC	
	or JCY0035-NS	IC	
IC203	AN2018S	IC	
Q203	2SC3931(CD)	TRANSISTOR	
Q204	2SC4081(QR)	TRANSISTOR	
	or 2SC4116(YG)	TRANSISTOR	
Q205	2SC4081(QR)	TRANSISTOR	
	or 2SC4116(YG)	TRANSISTOR	
D201	1SS355	DIODE	
D204	MA8082(HM)	ZENER DIODE	
R201	NRSA63J-153X	RESISTOR	15kΩ,1/16V
R204	NRSA63J-0R0X	RESISTOR	0Ω,1/16V
R205	NRSA63J-104X	RESISTOR	100kΩ,1/16V
R212	NRSA63J-332X	RESISTOR	3.3kΩ,1/16V
R213	NRSA63J-105X	RESISTOR	1MΩ,1/16V
R214	NRSA63J-100X	RESISTOR	10Ω,1/16V
R215	NRSA63J-562X	RESISTOR	5.6kΩ,1/16V
R216	NRSA63J-222X	RESISTOR	2.2kΩ,1/16V
R217	NRSA63J-101X	RESISTOR	100Ω,1/16V
R218	NRSA63J-560X	RESISTOR	56Ω,1/16V
R219	NRSA63J-560X	RESISTOR	56Ω,1/16V
R220	NRSA63J-101X	RESISTOR	100Ω,1/16V
R221	NRSA63J-223X	RESISTOR	22kΩ,1/16V
R222	NRSA63J-103X	RESISTOR	10kΩ,1/16V
R223	NRSA63J-223X	RESISTOR	22kΩ,1/16V
R226	NRSA63J-0R0X	RESISTOR	0Ω,1/16V

⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
R228	NRSA63J-332X	RESISTOR	3.3kΩ,1/16W
R229	NRSA63J-152X	RESISTOR	1.5kΩ,1/16W
R230	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R231	NRSA63J-101X	RESISTOR	100Ω,1/16W
R232	NRSA63J-220X	RESISTOR	22Ω,1/16W
R233	NRSA63J-220X	RESISTOR	22Ω,1/16W
R234	NRSA63J-101X	RESISTOR	100Ω,1/16W
R235	NRSA63J-101X	RESISTOR	100Ω,1/16W
R238	NRSA63J-103X	RESISTOR	10kΩ,1/16W
C201	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C202	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C205	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C206	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C209	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C210	NEA70JM-226X	E CAPACITOR	22μF,6.3V
C211	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C212	NEA71EM-475X	E CAPACITOR	4.7μF,25V
C213	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C214	NEA71EM-475X	E CAPACITOR	4.7μF,25V
C215	NCB21EK-104X	CAPACITOR	0.1μF,25V
C216	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C217	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C218	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C219	NBE21CM-105X	E CAPACITOR	1μF,16V
C220	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C221	NEA70JM-226X	E CAPACITOR	22μF,6.3V
C223	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C224	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C225	NDC31HJ-470X	CAPACITOR	47pF,50V
C226	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C227	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C228	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C229	NDC31HJ-560X	CAPACITOR	56pF,50V
C230	NDC31HJ-101X	CAPACITOR	100pF,50V
C231	NEA70JM-107X	E CAPACITOR	100μF,6.3V
C235	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C236	NBE41AM-106X	E CAPACITOR	10μF,10V
C237	NCB31HK-102X	CAPACITOR	0.001μF,50V
L201	YU40740-220K	COIL	22μH
L202	YU40740-220K	COIL	22μH
L203	YU40740-220K	COIL	22μH
L204	YU40740-220K	COIL	22μH
L205	YU40740-220K	COIL	22μH
L206	YU41607-Y	CHIP FERR.B	
L207	YU41607-Y	CHIP FERR.B	
L208	YU41607-Y	CHIP FERR.B	
X201	PEVB0638-P	CXO	
CN201	PEMC1071	CCD SOCKET	
CN202	PEMC0880-028-X	CONNECTOR	
CN203	YU41356-4-R	CONNECTOR	

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APS BOARD ASSEMBLY(GR-AX460EG)<07>

PWBA	YB20750A2-02	APS BOARD ASSY	
ML1	ML-Y00719A	WIRE	
PS1	PESC1163	PH INTERRUPTER	

#⚠ REF No. PART No. PART NAME, DESCRIPTION

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IR BOARD ASSEMBLY <08>

PWBA	PEAS2183-02	IR BOARD ASSY	

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OPERATION BOARD ASSEMBLY <09>

PWBA	YQ20905	OPERATION(CAMERA)BOARD ASSY,AX460EG	
	YQ20967	OPERATION(CAMERA)BOARD ASSY,AX260EG/AX360EG	

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E.VF BOARD ASSEMBLY(GR-AX260EG/AX460EG TYPE T)<10>

PWBA	YB20748E-03	EVF BOARD ASSY	
IC7001	BA7149F-XE	IC	
Q7001	2SD968A(RS)	PH TRANSISTOR	
Q7002	2SA1748(QR)	PH TRANSISTOR	
Q7003	2SA1748(QR)	PH TRANSISTOR	
D7001	MA142WA	DIODE	
R7002	QRSA08J-3R9YN	RESISTOR	3.9Ω,1/10W
R7003	NRVA62D-183N	RESISTOR	18kΩ,1/16W
R7005	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
R7006	QRSA08J-113YN	RESISTOR	11kΩ,1/10W
R7007	QRSA08J-330YN	RESISTOR	33Ω,1/10W
R7008	QRSA08J-394YN	RESISTOR	390kΩ,1/10W
R7009	QRSA08J-103YN	RESISTOR	10kΩ,1/10W
R7010	NRVA62D-104N	RESISTOR	100kΩ,1/16W
R7011	NRVA62D-153N	RESISTOR	15kΩ,1/16W
R7012	QRSA08J-221YN	RESISTOR	220Ω,1/10W
R7013	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
R7014	QRSA08J-472YN	RESISTOR	4.7kΩ,1/10W
R7015	QRSA08J-223YN	RESISTOR	22kΩ,1/10W
R7016	QRSA08J-122YN	RESISTOR	1.2kΩ,1/10W
R7017	QRSA08J-472YN	RESISTOR	4.7kΩ,1/10W
R7018	QRSA08J-223YN	RESISTOR	22kΩ,1/10W
R7019	QRSA08J-120YN	RESISTOR	12Ω,1/10W
R7020	QRS188J-685YN	RESISTOR	6.8MΩ,1/8W
R7021	QRSA08J-475YN	RESISTOR	4.7MΩ,1/10W
R7022	QRSA08J-475YN	RESISTOR	4.7MΩ,1/10W
R7023	QRSA08J-564YN	RESISTOR	560kΩ,1/10W
R7024	QRSA08J-105YN	RESISTOR	1MΩ,1/10W
R7025	QRSA08J-275YN	RESISTOR	2.7MΩ,1/10W
R7026	QRSA08J-275YN	RESISTOR	2.7MΩ,1/10W
R7029	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
R7030	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
VR7001	NVP0001-221X	V RESISTOR,V SIZE	
VR7002	NVP0001-225X	V RESISTOR,BRIGHT	
VR7003	PERE0595-565	V RESISTOR,FOCUS	
C7001	QFV21HJ-104AZ	F CAPACITOR	0.1μF,50V
C7002	PECA1131-A107	E CAPACITOR	100μF,10V
C7003	PECA1131-A107	E CAPACITOR	100μF,10V

#⚠	REF No.	PART No.	PART NAME, DESCRIPTION	
	C7004	PECA1132-A107	E CAPACITOR	100μF,10V
	C7005	QCFA1CZ-105	CAPACITOR	1μF,16V
	C7006	QCYA1EK-153	CAPACITOR	0.015μF,25V
	C7007	QCY81CK-105	CAPACITOR	1μF,16V
	C7008	QCFA1CZ-105	CAPACITOR	1μF,16V
	C7009	PECA1131-A107	E CAPACITOR	100μF,10V
	C7010	PECA1135-Y	CAPACITOR	
	C7011	QCTA1CH-180	CAPACITOR	18pF,16V
	C7012	QEKC1HM-105	E CAPACITOR	1μF,50V
	C7013	QCFA1HZ-104	CAPACITOR	0.1μF,50V
	C7014	QCFA1HZ-104	CAPACITOR	0.1μF,50V
	C7015	QCZ0136-151Z	CAPACITOR	150pF,1kV
	C7016	PECA1133	CAPACITOR	330pF,500V
	L7001	PELN1175	COIL	
	L7002	PU49993-101	COIL	100μH
	L7003	PELN1101-680JY	COIL	68μH
⚠	T7001	PELN1174	FB TRANS	
	CN7001	PEMC0856-4	CONNECTOR	
	CN7002	PEMC1004-006	CONNECTOR	
	CN7003	PEMC1172	CONNECTOR	

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UPPER DRUM BOARD <40>

PWB	YDM3073-2-1	BOARD (UPPER DRUM)	

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E.VF BOARD ASSEMBLY(GR-AX260EG/AX460EG TYPE M)<50>

#⚠	REF No.	PART No.	PART NAME, DESCRIPTION	
	PWBA	YQ31803-600	E.VF BOARD ASSY	
	IC1	BA7149F	IC	
	Q1	2SA1037K	TRANSISTOR,TR1	
		or 2SA1179	TRANSISTOR,TR1	
		or 2SA1235	TRANSISTOR,TR1	
	Q2	2SC4132	TRANSISTOR,TR2	
	Q3	2SC4618	TRANSISTOR,TR3	
		or 2SC4655	TRANSISTOR,TR3	
	D1	RLS245	DIODE	
	R1	YQ31803-501	RESISTOR	9.1kΩ,1/10W
	R2	QRSA08G-333YN	RESISTOR	33kΩ,1/10W
	R3	QRSA08J-3R9YN	RESISTOR	3.9Ω,1/10W
	R4	QRSA08J-390YN	RESISTOR	39Ω,1/10W
	R5	YU30595-111	RESISTOR	390Ω,1/10W
	R6	YU30595-113	RESISTOR	91kΩ,1/10W
	R7	QRSA08J-103YN	RESISTOR	10kΩ,1/10W
	R8	YQ31803-502	RESISTOR	2.2kΩ,1/10W
	R9	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
	VR1	YQ31803-504	V RESISTOR,V SIZE	
	VR2	YQ31803-505	V RESISTOR,H HOLD	
	VR4	YQ31803-506	V RESISTOR,BRIGHT	
	R10	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
	R11	QRSA08J-330YN	RESISTOR	33Ω,1/10W
	R12	QRSA08J-113YN	RESISTOR	11kΩ,1/10W
	R13	YQ31803-503	RESISTOR	3.9kΩ,1/10W
	R14	QRSA08J-822YN	RESISTOR	8.2kΩ,1/10W
	R15	QRSA08J-182YN	RESISTOR	1.8kΩ,1/10W
	R16	QRSA08J-332YN	RESISTOR	3.3kΩ,1/10W
	R17	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
	R18	QRSA08J-471YN	RESISTOR	470Ω,1/10W
	R19	QRSA08F-103YN	RESISTOR	10kΩ,1/10W
	R20	QRSA08F-152YN	RESISTOR	1.5kΩ,1/10W
	R21	QRSA08J-275YN	RESISTOR	2.7MΩ,1/10W
	R22	QRSA08J-275YN	RESISTOR	2.7MΩ,1/10W
	R23	QRSA08J-105YN	RESISTOR	1MΩ,1/10W
	R24	QRSA08J-154YN	RESISTOR	150kΩ,1/10V
	R25	QRSA08J-2R7YN	RESISTOR	2.7Ω,1/10V
	R26	QRSA08J-472YN	RESISTOR	4.7kΩ,1/10V
	R27	QRSA08J-102YN	RESISTOR	1kΩ,1/10V
	C1	YQ31803-507	CAPACITOR	0.22μF,16
	C2	YQ31304-503	CAPACITOR	1μF,16
	C3	YQ31304-504	CAPACITOR	1500pF,50V
	C4	YQ31304-503	CAPACITOR	1μF,16V
	C5	YQ31304-506	E CAPACITOR	100μF,10V
	C6	YQ31304-506	E CAPACITOR	100μF,10V
	C7	YQ31304-506	E CAPACITOR	100μF,10V
	C8	YQ31304-503	CAPACITOR	1μF,16V
	C9	YQ31392-501	CAPACITOR	100pF,16V
	C10	YU30531-163	CAPACITOR	0.047μF
	C11	QER61HM-100	E CAPACITOR	10pF,50V
	C12	YQ31803-508	F CAPACITOR	6200pF,100V
	C13	YQ31304-506	E CAPACITOR	100μF,10V
	C14	YQ31304-507	CAPACITOR	1500pF,630V
	L1	YQ30723-115	COIL	100μH
	TH1	YU30236-110	THERMISTOR	
	WR1	YQ31803-580	FPC	
⚠	FBT1	YQ31803-550	FLY BACK TRANS	
	HLC1	YQ31803-560	H.COIL	
	CN1	YQ31803-570	CONNECTOR	
	CN2	YQ31803-571	CONNECTOR	
	CN3	YQ31803-572	CONNECTOR	

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PBL BOARD ASSEMBLY(GR-AX360EG)<51>

	PWBA1	YB20747B1-01	PBL BOARD ASSY	
	IC7101	FA7615M-XE	IC	
	IC7102	TA75S01F	IC	
	IC7103	TC7W04FU	IC	
	Q7101	DTC143EE	TRANSISTOR	
	Q7102	2SK1254S	TRANSISTOR	
	Q7103	2SC3646(ST)	TRANSISTOR	
	Q7104	DTC143EE	TRANSISTOR	
	Q7107	UMX2N	TRANSISTOR	
	Q7108	XP6534	TRANSISTOR	
	D7101	SB07-03C-X	SB DIODE	
	D7102	MA111	DIODE	
	R7101	NRVA63D-272X	CMF RESISTOR	2.7kΩ,1/16W
	R7102	NRVA63D-123X	MF RESISTOR	12kΩ,1/16W
	R7103	NRSA63J-474X	RESISTOR	470kΩ,1/16W
	R7104	NRVA63D-683X	CMF RESISTOR	68kΩ,1/16W
	R7105	NRVA63D-153X	MF RESISTOR	15kΩ,1/16W

△REF No.	PART No.	PART NAME, DESCRIPTION	
R7106	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R7107	NRVA63D-333X	CMF RESISTOR	33kΩ,1/16W
R7108	NRSA63J-474X	RESISTOR	470kΩ,1/16W
R7109	NRSA63J-274X	RESISTOR	270kΩ,1/16W
R7110	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R7111	NRVA63D-223X	CMF RESISTOR	22kΩ,1/16W
R7112	NRVA63D-223X	CMF RESISTOR	22kΩ,1/16W
R7113	NRVA63D-223X	CMF RESISTOR	22kΩ,1/16W
R7114	NRVA63D-472X	MF RESISTOR	4.7kΩ,1/16W
R7115	NRSA63J-682X	RESISTOR	6.8kΩ,1/16W
R7116	NRSA63J-681X	RESISTOR	680Ω,1/16W
R7117	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R7118	NRSA63J-683X	RESISTOR	68kΩ,1/16W
R7119	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R7120	NRSA63J-823X	RESISTOR	82kΩ,1/16W
R7121	NRVA63D-563X	MF RESISTOR	56kΩ,1/16W
R7122	NRVA63D-183X	MF RESISTOR	18kΩ,1/16W
R7123	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W
R7124	NRVA63D-273X	MF RESISTOR	27kΩ,1/16W
R7125	NRVA63D-151X	MF RESISTOR	150Ω,1/16W
R7126	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R7129	NRSA63J-155X	RESISTOR	1.5MΩ,1/16W
R7130	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R7132	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R7133	NRSA63J-333X	RESISTOR	33kΩ,1/16W
R7134	NRSA63J-183X	RESISTOR	18kΩ,1/16W
R7135	NRSA63J-332X	RESISTOR	3.3kΩ,1/16W
R7136	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R7137	NRSA63J-821X	RESISTOR	820Ω,1/16W
R7138	NRSA63J-821X	RESISTOR	820Ω,1/16W
R7139	NRSA63J-332X	RESISTOR	3.3kΩ,1/16W
R7140	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R7141	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R7142	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R7143	NRSA63J-2R2X	RESISTOR	2.2Ω,1/16W
R7144	NRSA63J-225X	RESISTOR	2.2MΩ,1/16W
R7145	NRSA63J-225X	RESISTOR	2.2MΩ,1/16W
VR7101	NVP1202-102N	V RESISTOR,REG13.5V	
VR7102	NVP1202-223N	V RESISTOR,B-SUB BGIGHT	
VR7103	NVP1202-223N	V RESISTOR,BRIGHT	
C7101	NCF31CZ-104X	CAPACITOR	0.1µF,16V
C7102	NCB31EK-103X	CAPACITOR	0.01µF,25V
C7103	NCF31CZ-104X	CAPACITOR	0.1µF,16V
C7104	NBE50GM-686X	E CAPACITOR	68µF,4.0V
C7105	NDC21HJ-222X	CAPACITOR	0.0022µF,50V
C7106	NCF31CZ-104X	CAPACITOR	0.1µF,16V
C7107	NCF31CZ-104X	CAPACITOR	0.1µF,16V
C7108	NCF21CZ-105X	CAPACITOR	1µF,16V
C7109	NCB21EK-104X	CAPACITOR	0.1µF,25V
C7110	NCF31CZ-104X	CAPACITOR	0.1µF,16V
C7111	NDC31HK-330X	CAPACITOR	33pF,50V
C7112	NBE21CM-105X	E CAPACITOR	1µF,16V
C7113	NCF21CZ-105X	CAPACITOR	1µF,16V
C7114	NBE71CM-336X	E CAPACITOR	33µF,16V
C7115	NBE71AM-476X	E CAPACITOR	47µF,10V
C7116	NCF21CZ-105X	CAPACITOR	1µF,16V
C7117	NBE71DM-226X	E CAPACITOR	22µF,20V
C7120	NCB31EK-103X	CAPACITOR	0.01µF,25V
C7121	NCF21CZ-105X	CAPACITOR	1µF,16V
C7122	NDC31HK-560X	CAPACITOR	56pF,50V
C7123	NCB31HK-102X	CAPACITOR	0.001µF,50V
C7124	NCB31HK-102X	CAPACITOR	0.001µF,50V

#△ REF No.	PART No.	PART NAME, DESCRIPTION	
C7125	NDC31HK-560X	CAPACITOR	56pF,50V
C7126	NCB31EK-103X	CAPACITOR	0.01µF,25V
L7101	PELN1099-820MP	COIL	82µH
L7102	YU41135-220K	COIL	22µH
L7103	PELN0999-681MP	COIL	680µH
T7101	PELN1190-R	SW TRANS	
SD1	YU42070	SHIELD PLATE	
CN7101	PEMC0855-010-R	CONNECTOR	
CN7102	PEMC0967-012-P	CONNECTOR	
CN7103	PEMC0907-010-P	CONNECTOR	

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CLD BOARD ASSEMBLY(GR-AX360EG)<52>

PWBA2	YB20747B2-01	CLD BOARD ASSY	
IC7201	CXA1854AR	IC	
Q7201	2SC4655(BC)	TRANSISTOR	
Q7202	UMZ1N	TRANSISTOR	
Q7203	XN4504	TRANSISTOR	
Q7204	2SC4617(QR)	TRANSISTOR	
D7201	MA365	DIODE	
R7201	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R7202	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R7203	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R7204	NRSA63J-563X	RESISTOR	56kΩ,1/16W
R7205	NRSA63J-393X	RESISTOR	39kΩ,1/16W
R7206	NRSA63J-563X	RESISTOR	56kΩ,1/16W
R7207	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R7209	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R7212	NRVA63D-223X	CMF RESISTOR	22kΩ,1/16W
R7213	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R7214	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R7215	NRVA63D-472X	MF RESISTOR	4.7kΩ,1/16W
R7216	NRVA63D-472X	MF RESISTOR	4.7kΩ,1/16W
R7217	NRSA63J-274X	RESISTOR	270kΩ,1/16W
R7218	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R7219	NRSA63J-333X	RESISTOR	33kΩ,1/16W
R7220	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R7221	NRSA63J-273X	RESISTOR	27kΩ,1/16W
R7222	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R7223	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R7224	NRSA63J-334X	RESISTOR	330kΩ,1/16W
R7225	NRSA63J-334X	RESISTOR	330kΩ,1/16W
R7226	NRSA63J-334X	RESISTOR	330kΩ,1/16W
R7227	NRVA63D-333X	CMF RESISTOR	33kΩ,1/16W
R7228	NRVA63D-563X	MF RESISTOR	56kΩ,1/16W
R7232	NRSA63J-393X	RESISTOR	39kΩ,1/16W
R7233	NRSA63J-393X	RESISTOR	39kΩ,1/16W
R7234	NRSA63J-393X	RESISTOR	39kΩ,1/16W
R7236	NRVA63D-563X	MF RESISTOR	56kΩ,1/16W
R7237	NRVA63D-333X	CMF RESISTOR	33kΩ,1/16W
R7238	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R7239	NRSA63J-473X	RESISTOR	47kΩ,1/16W
R7240	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R7241	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R7244	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R7245	NRVA63D-122X	MF RESISTOR	1.2kΩ,1/16W
R7246	NRVA63D-183X	MF RESISTOR	18kΩ,1/16W

#△	REF No.	PART No.	PART NAME, DESCRIPTION	
	R7247	NRVA63D-153X	MF RESISTOR	15kΩ,1/16W
	R7248	NRSA63J-274X	RESISTOR	270kΩ,1/16W
	R7249	NRSA63J-224X	RESISTOR	220kΩ,1/16W
	R7250	NRSA63J-393X	RESISTOR	39kΩ,1/16W
	R7251	NRSA63J-393X	RESISTOR	39kΩ,1/16W
	R7252	NRSA63J-393X	RESISTOR	39kΩ,1/16W
	R7254	NRSA63J-100X	RESISTOR	10Ω,1/16W
	R7255	NRSA63J-100X	RESISTOR	10Ω,1/16W
	R7258	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
	VR7201	NVP1202-473N	V RESISTOR,PLL	
	VR7203	NVP1202-223N	V RESISTOR,R BRIGHT	
	VR7204	NVP1202-223N	V RESISTOR,B BRIGHT	
	VR7205	NVP1202-223N	V RESISTOR,BLACK LEVEL	
	VR7206	NVP1202-473N	V RESISTOR,WHITE LEVEL	
	C7201	NBE21CM-105X	E CAPACITOR	1μF,16V
	C7202	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7203	NBE21CM-105X	E CAPACITOR	1μF,16V
	C7204	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7205	NCF31CZ-104X	CAPACITOR	0.1μF,16V
	C7206	NCF11CZ-225X	CAPACITOR	2.2μF,16V
	C7207	NCB31HK-332X	CAPACITOR	0.0033μF,50V
	C7208	NDC31HK-221X	CAPACITOR	220pF,50V
	C7209	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7210	NDC31HJ-330X	CAPACITOR	33pF,50V
	C7211	NBE21CM-155X	E CAPACITOR	1.5μF,16V
	C7212	NBE21CM-155X	E CAPACITOR	1.5μF,16V
	C7213	NBE21CM-155X	E CAPACITOR	1.5μF,16V
	C7214	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7215	NBE41CM-106X	E CAPACITOR	10μF,16V
	C7216	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7218	NBE20JM-106X	E CAPACITOR	10μF,6.3V
	C7219	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7220	NCF21CZ-105X	CAPACITOR	1μF,16V
	C7221	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7222	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7223	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7224	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7226	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7227	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7228	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7229	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7230	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7231	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7232	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7233	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7234	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7235	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7236	NBE21CM-105X	E CAPACITOR	1μF,16V
	C7237	NBE21AM-225X	E CAPACITOR	2.2μF,10V
	C7238	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7239	NBE21DM-155X	E CAPACITOR	1.5μF,20V
	C7240	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7241	NBE20JM-106X	E CAPACITOR	10μF,6.3V
	L7201	PELN0865-100KY	COIL	10μH
	L7202	PELN0704-100KY	COIL	10μH
	L7204	PELN0704-100KY	COIL	10μH
	CN7201	YU41358-12-R	CONNECTOR	
	CN7202	PEMC0880-016-R	CONNECTOR	
	CN7203	YU41361-10-P	CONNECTOR	

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BL BOARD ASSEMBLY(GR-AX360EG)<53>

#△	REF No.	PART No.	PART NAME, DESCRIPTION
	PWBA3	YB20747B3-01	BL BOARD ASSY
	BL7301	PEDP0195	LAMP
	CN7301	YU41359-10-P	CONNECTOR

SECTION 6
TECHNICAL INFORMATION

6.1 EMERGENCY DISPLAY

Whenever some abnormal signal is supplied to mechacon CPU, an error number (E 04, for example) displayed in the electronic view finder.

E. VF DISPLAY	Symptom	Mode when observed	Resulting mode
E07	Short circuit of capstan MDA	Power ON	Power OFF
E06	CAPSTAN FG input absent	EDIT	STOP
E04	DRUM FF input absent	DRUM rotation	STOP
E03	SUPPLY REEL FG input absent	REC, PLAY, SEARCH, FF	STOP
E02	Mode control motor rotates for more than 10 sec without shift to next mode.	UNLOADING	Mode continues
E01	Mode control motor rotates for more than 10 sec without shift to next mode.	LOADING	Mode continues
E00	Overtime the programing transaction	REC,PLAY	EJECT

Emergency mode : Indication for 5 minutes, then power OFF
Port states : Same as Stop mode
Effective key : POWER
Shifted mode : Power OFF